LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING
(AUTONOMOUS)
Accredited by NAAC with'A' Grade& NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST.,
A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222933, Fax: 08659-222931
DEPARTMENT OF COMPUTER SCIENCE &ENGINEERING

Activity based Learning Methods A.Y.2024-25, EVEN semesters

Sl. No	Semester	Faculty	Subject Name	Activity	Date
1	VI	Ch.Srinivasa Rao	Information Security	Seminar	10-01-2025
				Experimental Task	10-03-2025
				Electing Activities	12-03-2025
				Coding Practices	19-03-2025
2	VI	T.N.V. S. Praveen	Information Security	Phishing Simulation	10-01-2025
				Seminar	12-03-2025
3	VI	M.Swathi	Information Security	Seminar	27-12-2024
				Group Activity	14-02-2025
4	VI	Dr.D.Veeraiah	Compiler Design	Role Play	16-12-2024
				Seminar	29-03-2025
				Seminar	29-03-2025
5	VI	B.Swathi	Compiler Design	Poster-Based Learning	24-01-2025
				Quiz	22-03-2025
6	VI	M.Kiran	Compiler Design	Role Play	10-12-2024
				Seminar	11-03-2025
7	VI	Dr.K.Devi Priya	Big Data Analytics	Case Study	07-012025
				Problem Based Solving	30-01-2025
8	VI	D.Anil Kumar	Big Data Analytics	Seminar	04-01-2025
9	VI	P.Naga Babu	Big Data Analytics	Seminar	21-03-2025
10	VI	Dr.K.Devi Priya	Data Analytics and Visualization Lab	Problem Based Solving	23-012025
11	VI	P. Veera Swamy	Information Retrieval Systems	Case Studies and Real-World Scenarios	09-01-2025
12	VI	N.Srikanth	Information Retrieval Systems	Seminar	30-01-2025
13	VI	B. Usha rani	Information Retrieval Systems	Seminar	23-12-2024
				Seminar	31-12-2024
				Case Study	24-01-2025
				Seminar	21-03-2025
14	VI	B. Usha rani	SSS Lab	Web Application Development Using PHP	20-03-2025
	VI	Md.Amanatulla	SSS Lab	Seminar –Sec-B	07-04-2025

15				Seminar- Sec- C	07-04-2025
16	IV	Dr.Ch. Venkata Narayana	Operating Systems	Role-Play	01-04-2025
17	IV	Dr.D.Venkata Subbaiah	Operating Systems	Hands-On Session	01-04-2025
				Simulation project	27-01-2025
18	IV	Dr.B.Siva Rama Krishna	Operating Systems	Role Play	23-01-2025
				Hands-On session	20-02-2025
				Hands-On session	13-03-2025
19	IV	Dr.G.V. Suresh	Operating Systems	Seminar	01-02-2025
				Presentation	07-03-2025
20	IV	Dr.P.Bhagath	DBMS	Quiz	02-01-2025
				Datathon	27-01-2025
21	IV	G.V.Rajya Lakshmi	DBMS	Group Collaborative thinking	08-01-2025
				Surprise Quiz	30-01-2025
				Seminar	20-03-2025
22	IV	N.V.Naik	DBMS	Group Collaborative thinking	24-01-2025
				Seminar	29-01-2025
				Seminar and Problem solving	02-04-2025
23	IV	P.Sarala	DBMS	Seminar	01-02-2025
				Group Discussion	08-02-2025
24	IV	Dr.J.Nageswara Rao	Software Engineering	Seminar and Role Play	23-01-2025
				Student -Team -Achievement-Divisions	14-02-2025
25	IV	T.Vineetha	Software Engineering	Seminar and Role Play	23-01-2025
				Student -Team -Achievement-Divisions	14-02-2025
26	IV	M.Gayathri	Software Engineering	Role Play	07-01-2025
				Seminar	01-03-2025
				Poster Presentation	08-03-2025
27	IV	B.Nirosha	Software Engineering	Seminar	06-01-2025
				Role-Play and Seminar	31-01-2025
28	IV	A.Sudhakar	FSD-I	Case study project	28-03-2025
				Seminar	04-04-2025
29	IV	M.Kiran Kumar	FSD-I	Seminar – A sec	03-04-2025
				Seminar – B Sec	03-04-2025
30	IV	R.Ashok	FSD-I	Role Play with Brainstorming	02-04-2025
31	IV	Dr.D.Venkata Subbaiah	Design Thinking &Innovation	Workshop	09-01-2025
				Case study project	20-02-2025
32	IV	Dr.P.Bhagath	Design Thinking &Innovation	Chart Preparation	25-02-2025
				Demonstration of Model	01-04-2025

33	IV	Dr.B.Siva Rama Krishna	Design Thinking &Innovation	Workshop	07-02-2025
				Hands-On activity	01-03-2025
				Poster presentation	04-03-2025
34	II	Dr.Y.V.Bhaskar Reddy	Data Structures	Role Play	20-03-2025
35	II	Dr.S.Nagarjuna Reddy	Data Structures	Crossword puzzle	23-01-2025
				Virtual Quiz	24-02-2025
36	II	Dr.S.Govind	Data Structures	Seminar	20-03-2025
37	II	A.S.R.C.Murthy	Data Structures	Seminar	08-03-2025
38	II	N.Srinivasa Rao	Data Structures	Seminar	06-02-2025
				Seminar	06-03-2025
39	II	R.Ashok	Data Structures	Brainstorming with a Role-play Case Study	19-02-2025
				Collaborative Case Study	20-02-2025
40	II	S.Srinivas Reddy	Data Structures	Brain Quiz	14-08-2024
41	II	Dr.K. Venkata Rao	Introduction Programming	MCQs Test	19-03-2025
42	II	A.Koteswara Rao	Introduction Programming	Demonstration of Programs	01-04-2025
43	II	T.Anand	Introduction Programming	Flipped Class	29-03-2025

Dr.D.Veeraiah
Head of the Department

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(An Autonomous Institution since 2010)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018, 14001:2015, 50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details:

Course Name:	**Information Security**
Course Code:	**20CS17**
Branch/Sem/Section:	**CSE /VI /A**
Academic Year:	**2024-25**
Faculty Name:	**Ch. Srinivasa Rao**
Topic Selected:	**Phishing simulation**
Date of Activity:	**10-01-2025**

1. Selection of activity:

   In my course, I plan to conduct Phishing simulation in the context of activity-based learning refers to using simulated phishing attacks as an educational tool to teach individuals, especially in organizations, how to recognize and respond to phishing attempts.

2. Outcomes associated with Phishing simulation activity:

   The outcomes of phishing simulation in activity-based learning are typically focused on increasing participants' awareness, improving their skills in identifying phishing attempts, and enhancing overall cybersecurity behavior.

3. Objectives of Phishing simulation activity:

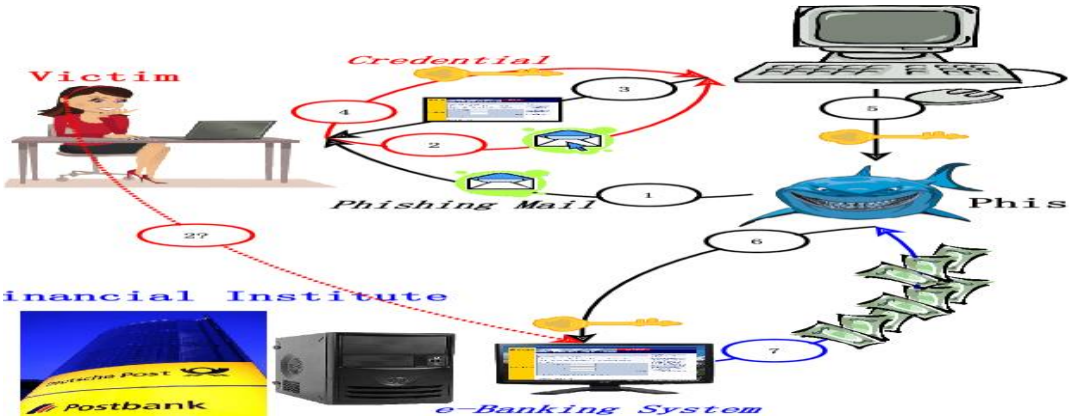
   The main objectives of collaborative activity are listed as follows. Raise Awareness About Phishing and Cybersecurity Threats

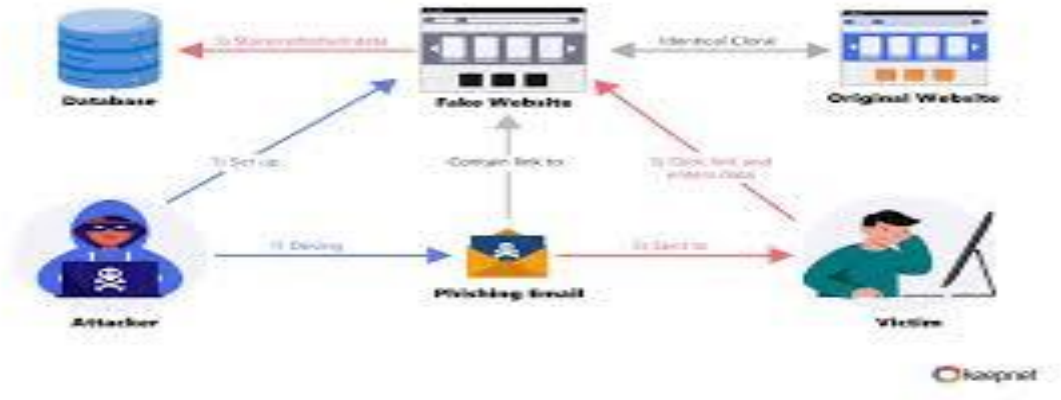
   - Enhance the Ability to Identify Phishing Attempts
   - Promote Safe Online Behavior and Practices

4. Step-by-step procedure to conduct an activity:
   - Define Learning Objectives
   - Set Up the Simulation Environment
   - Introducing the Concept of Phishing
   - Explain the Rules and Expectations
   - Conduct the Phishing Simulation

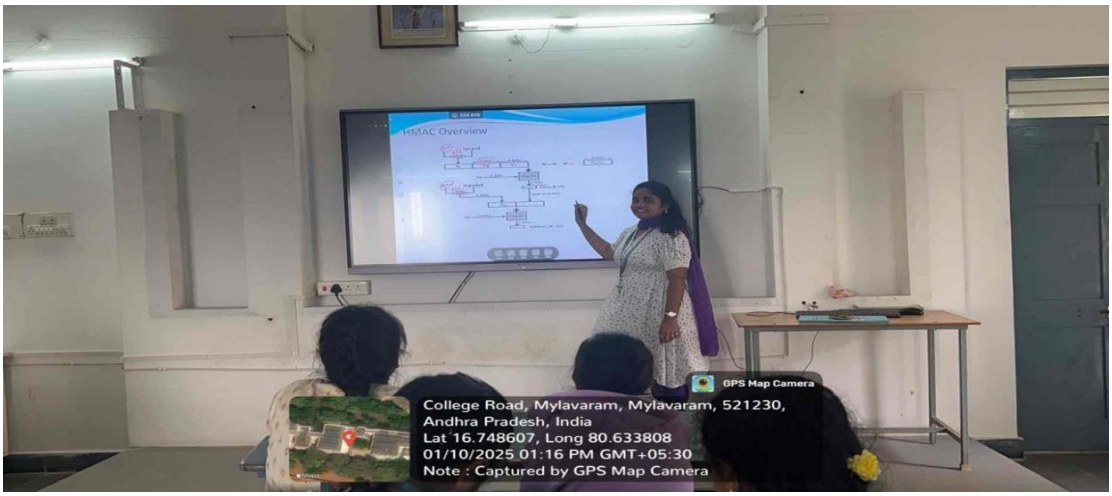
- Analyze and Discuss the Simulation Results
- Conduct a Knowledge Check (Optional)
- Provide Resources for Continued Learning
- Evaluate and Improve

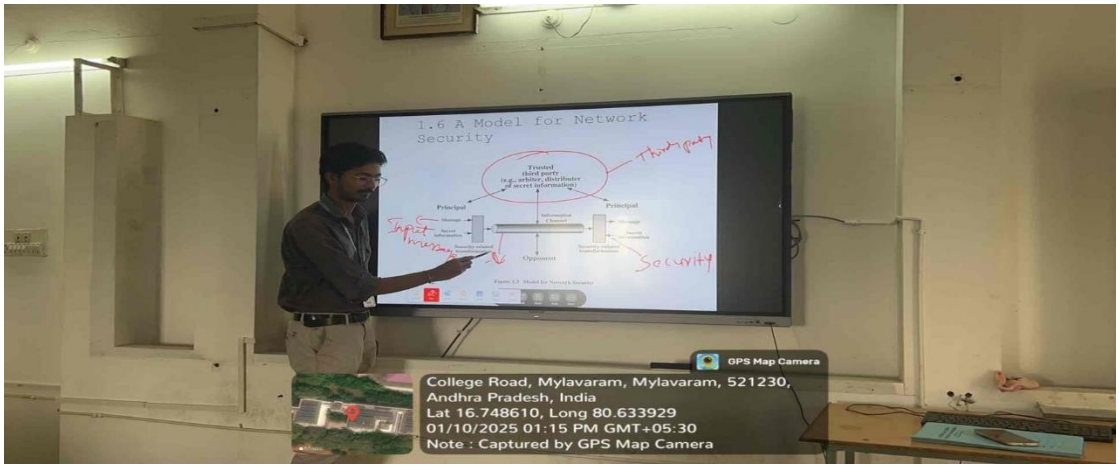
5. Sample diagrams for **Phishing Simulation**:





Activity Photos:





Course Instructor **Head of the Department**

Ch. Srinivasa Rao **Dr.D.Veeraiah**

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(An Autonomous Institution since 2010)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018, 14001:2015, 50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details:

Course Name:	**Information Security**
Course Code:	**20CS17**
Branch/Sem/Section:	**CSE /VI /A**
Academic Year:	**2024-25**
Faculty Name:	**Ch. Srinivasa Rao**
Topic Selected:	**Cryptography Exercises**
Date of Activity:	**10-03-2025**

1. Selection of activity:

   In my course, I plan to conduct Cryptography exercises in activity-based learning providing a hands-on and interactive way for learners to understand and apply cryptographic principles. These activities can help students or professionals develop practical skills in encryption, decryption, hashing, and understanding the importance of data security.

2. Outcomes associated with Cryptography exercises activity:

   The outcomes associated with cryptography concepts include a deeper understanding of data encryption, decryption, and secure communication methods. Participants also develop skills in implementing and analyzing cryptographic algorithms for real-world applications. Objectives of Phishing simulation activity:

3. Step-by-step procedure to conduct an activity:

   - **Introduce Cryptography Concepts**:

     Begin with a brief explanation of encryption, decryption, and key concepts like symmetric/asymmetric encryption and hashing.

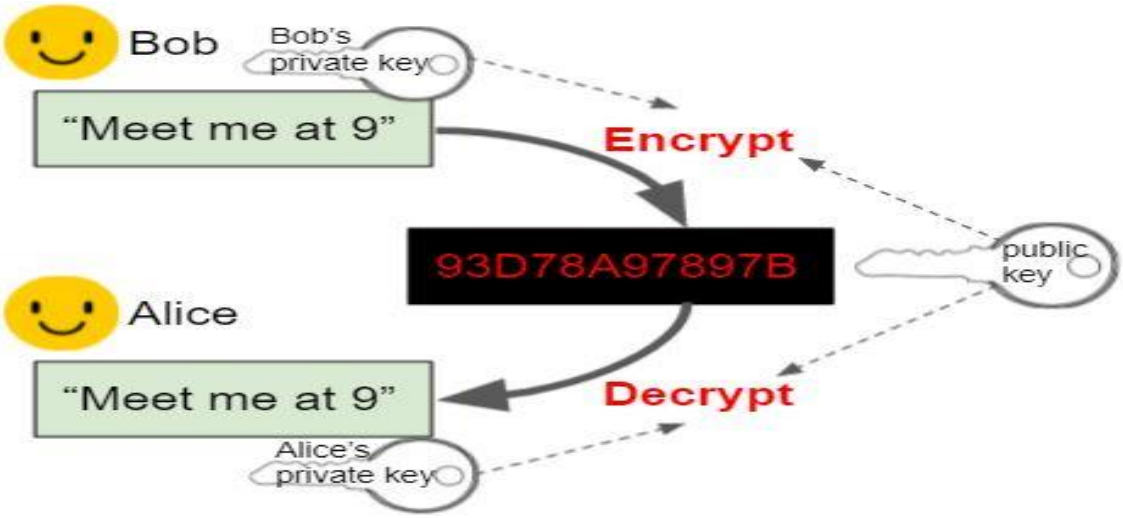
   - **Engage in Hands-On Activities**:

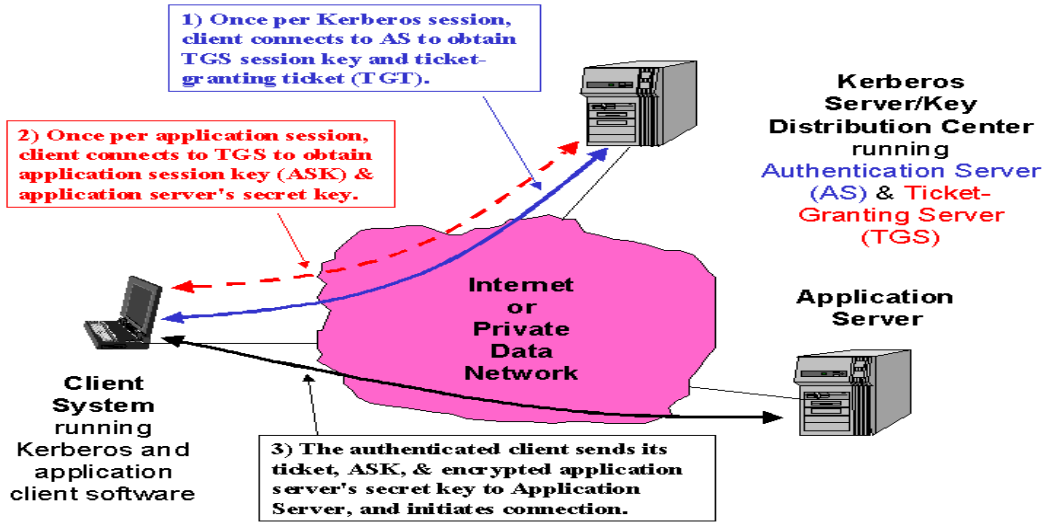
     Guide learners through exercises such as using ciphers (e.g., Caesar, RSA) to encrypt/decrypt messages, applying cryptographic algorithms, and implementing secure communication methods.

- **Analyze and Reflect**:

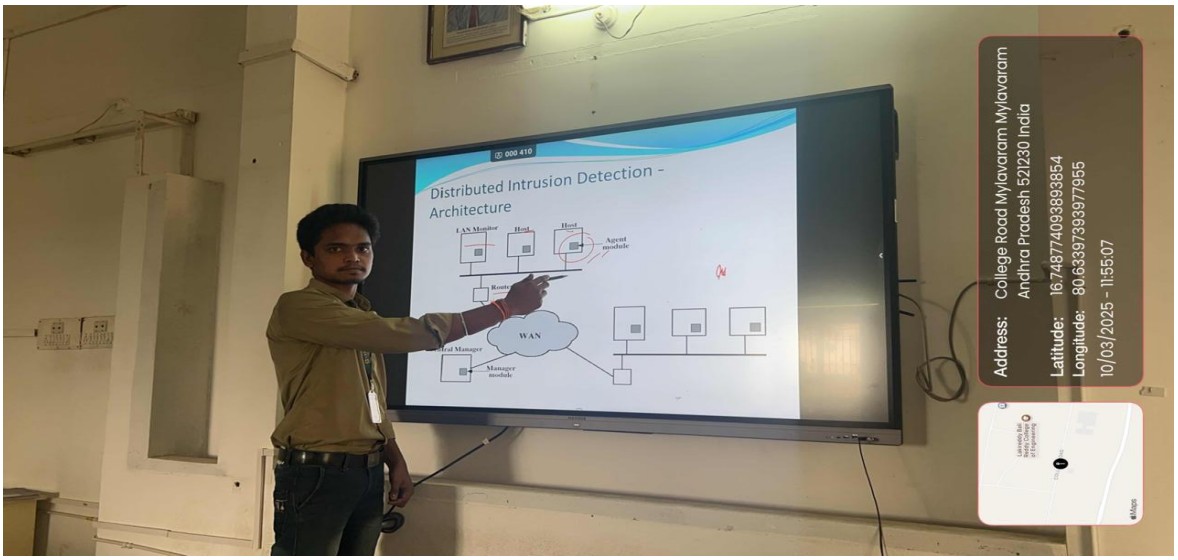
  Conclude with a group discussion to review the exercises, evaluate the effectiveness of the cryptographic methods, and explore real-world applications of cryptography.

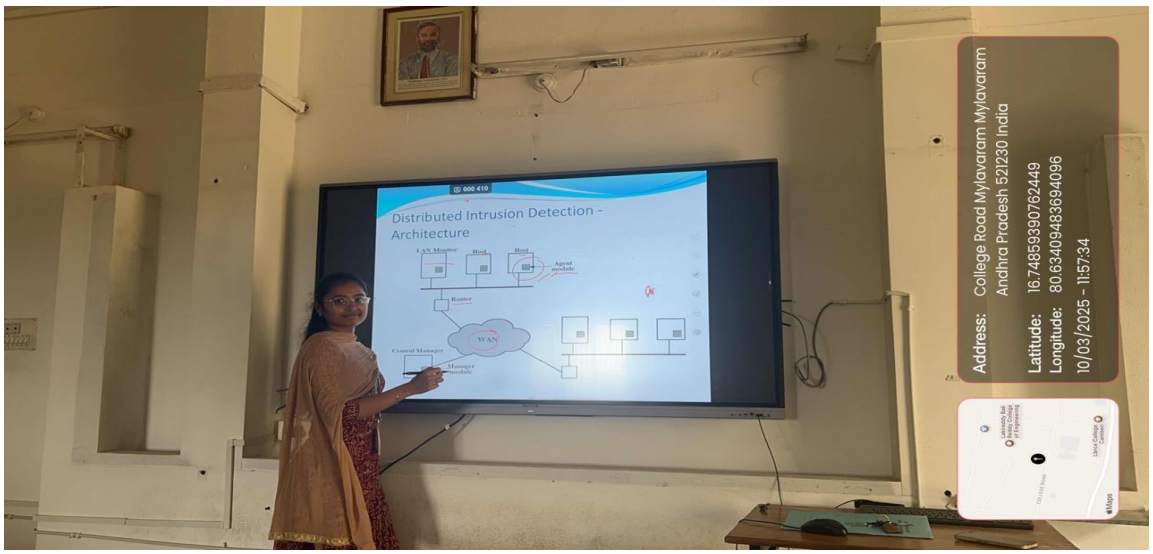
4. Sample diagrams for **Cryptography exercises**:

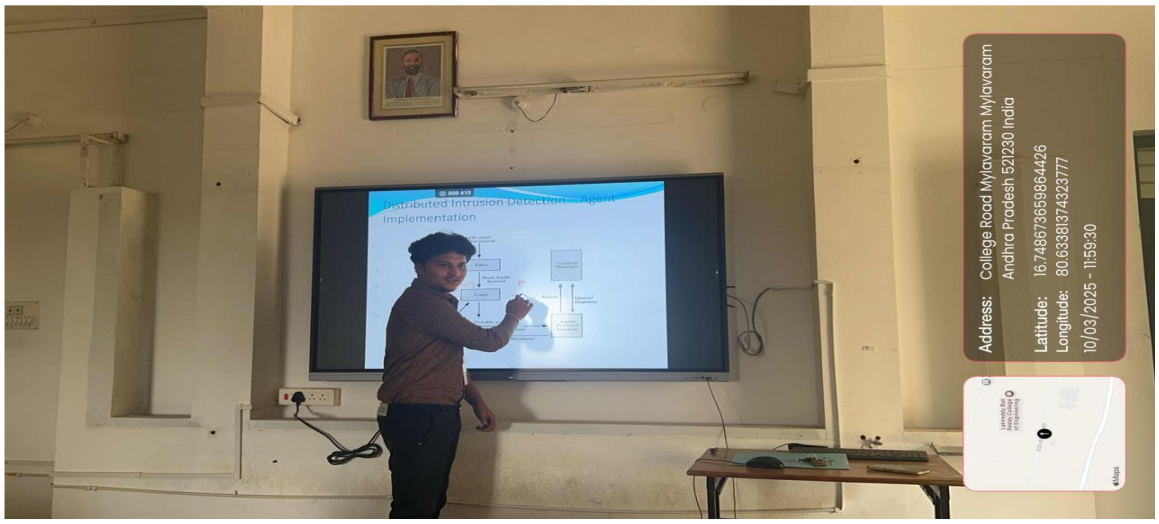


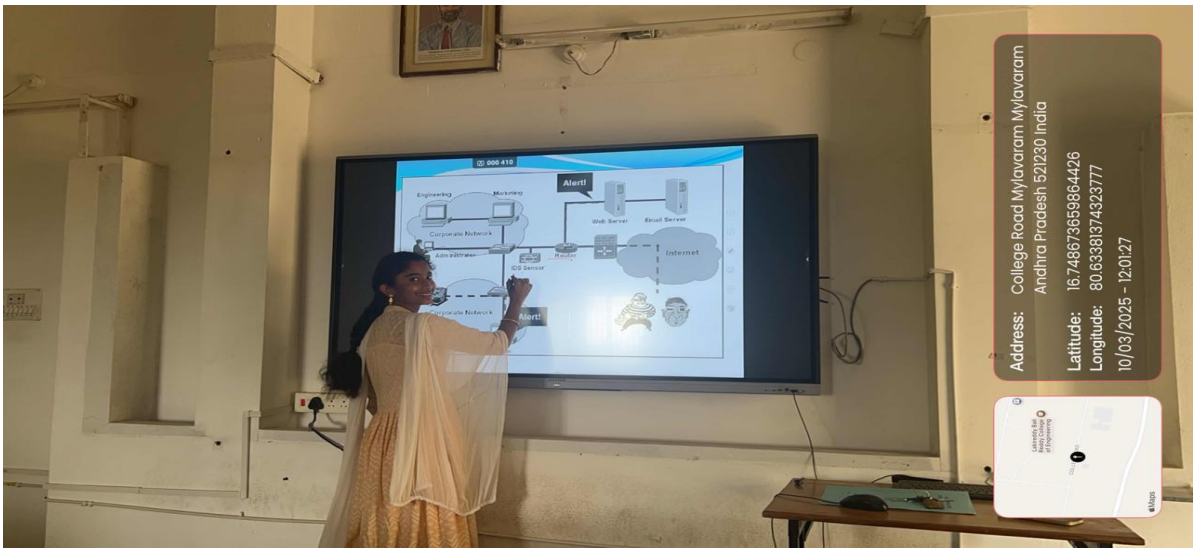


Activity Photos:









Course Instructor

Ch. Srinivasa Rao

Head of the Department

Dr.D.Veeraiah

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(An Autonomous Institution since 2010)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018, 14001:2015, 50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details:

Course Name:	**Information Security**
Course Code:	**20CS17**
Branch/Sem/Section:	**CSE /VI /B**
Academic Year:	**2024-25**
Faculty Name:	**T N V S Praveen**
Topic Selected:	**SSL, TLS & SET**
Date of Activity:	**12-03-2025**

Steps in SSL/TLS Handshake

The SSL/TLS protocol establishes a secure session in multiple steps:

Step 1: Client Hello (Client Initiation)

- The client (e.g., web browser) sends a **"Client Hello"** message to the server.
- This message includes:
  - Supported **TLS versions** (e.g., TLS 1.2, TLS 1.3).
  - A list of supported **cipher suites** (encryption algorithms).
  - A randomly generated number (Client Random) for encryption.

Step 2: Server Hello (Server Response)

- The server responds with a **"Server Hello"** message containing:
  - The selected **TLS version** and **cipher suite**.
  - Another randomly generated number (Server Random).
  - The server's **SSL/TLS certificate** (issued by a Certificate Authority, CA).

Step 3: Certificate Verification

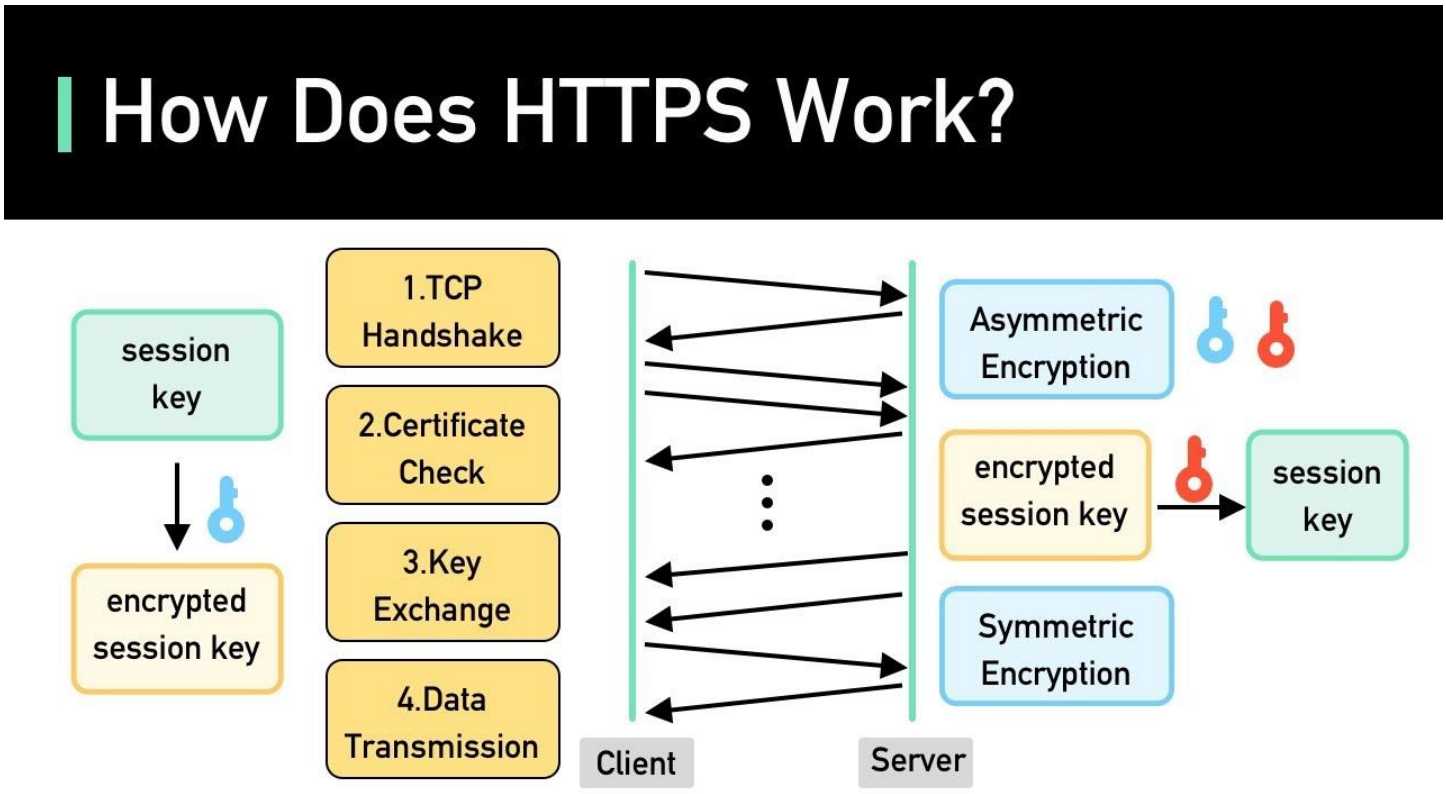
- The client verifies the server's **SSL/TLS certificate** to ensure:
  - It is issued by a **trusted Certificate Authority (CA)**.

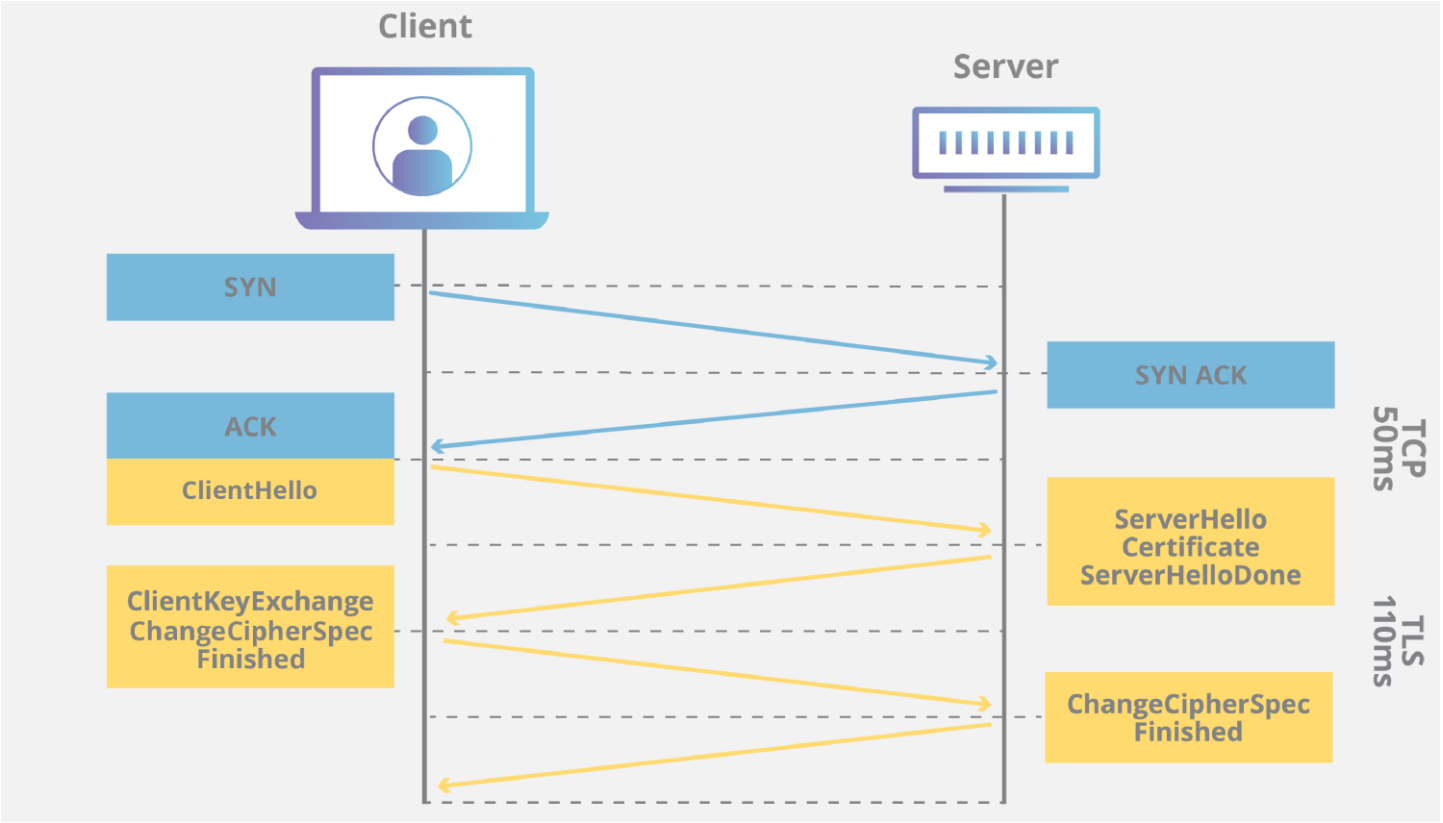
- The domain name matches the certificate.
- The certificate is not expired.

Step 4: Key Exchange & Session Key Generation

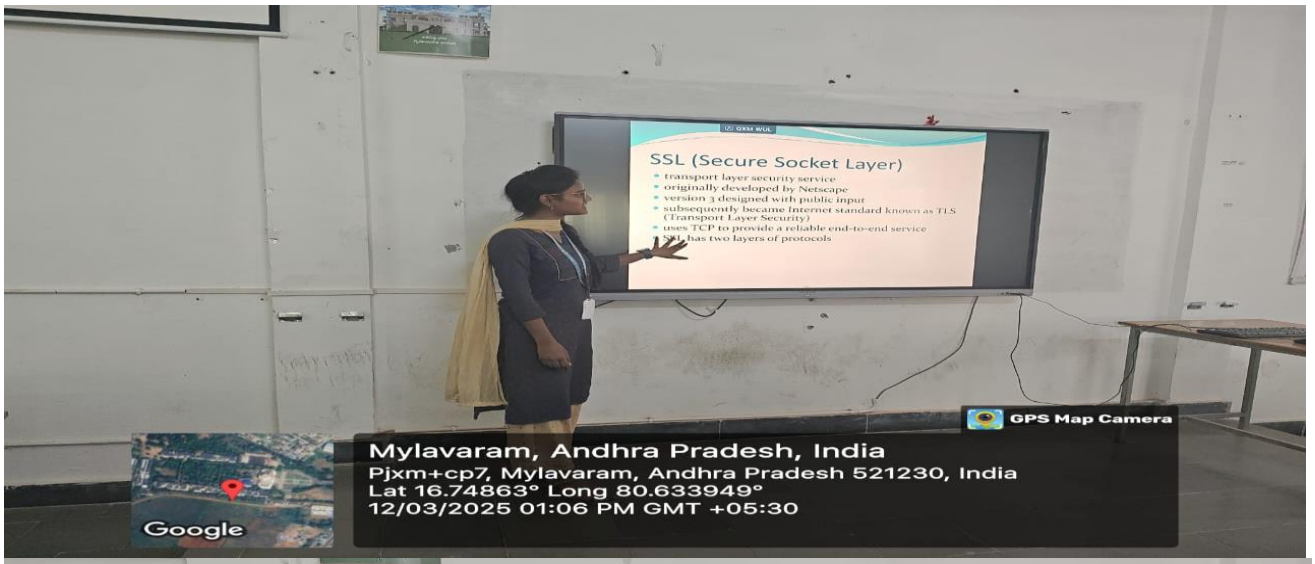
- The client and server generate a **shared session key** for symmetric encryption.
- Different key exchange methods are used:
  - **RSA (TLS 1.2 and earlier)**: The client encrypts a "pre-master secret" using the server's public key.
  - **Diffie-Hellman (DH) / Elliptic Curve Diffie-Hellman (ECDH) (TLS 1.2 and TLS 1.3)**: Both client and server exchange key parameters to derive the session key securely.
  - **TLS 1.3 (Perfect Forward Secrecy)**: Uses only Diffie-Hellman-based key exchanges.

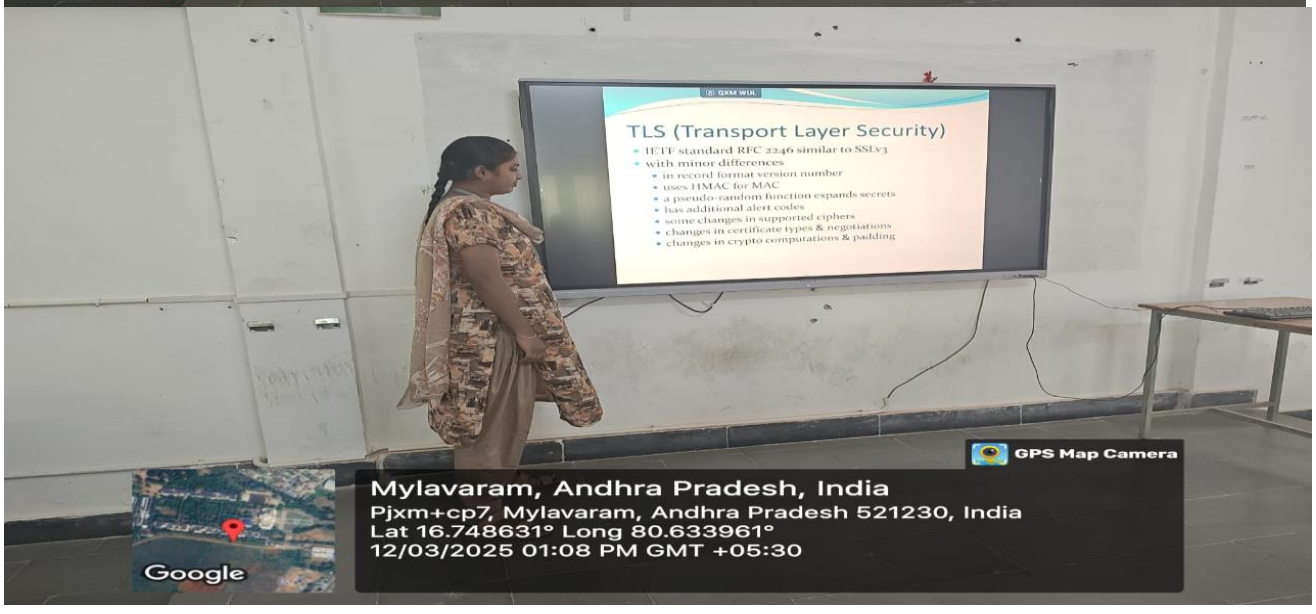
5. Sample diagrams for **SSL & TLS**:

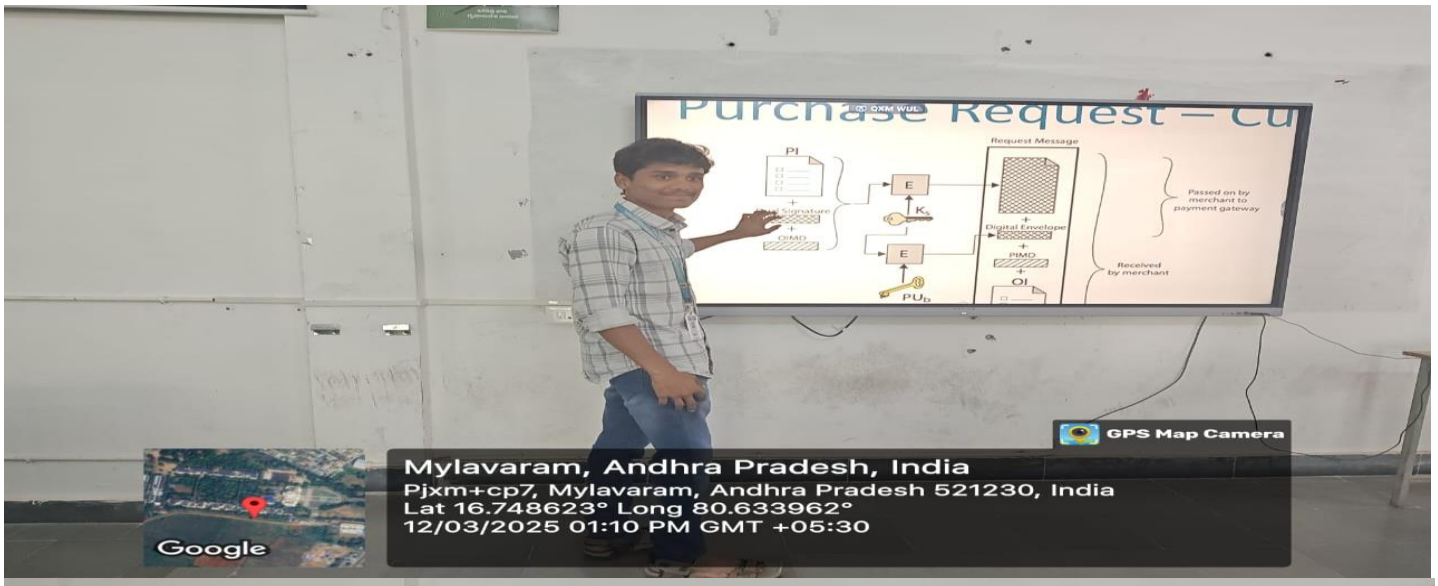


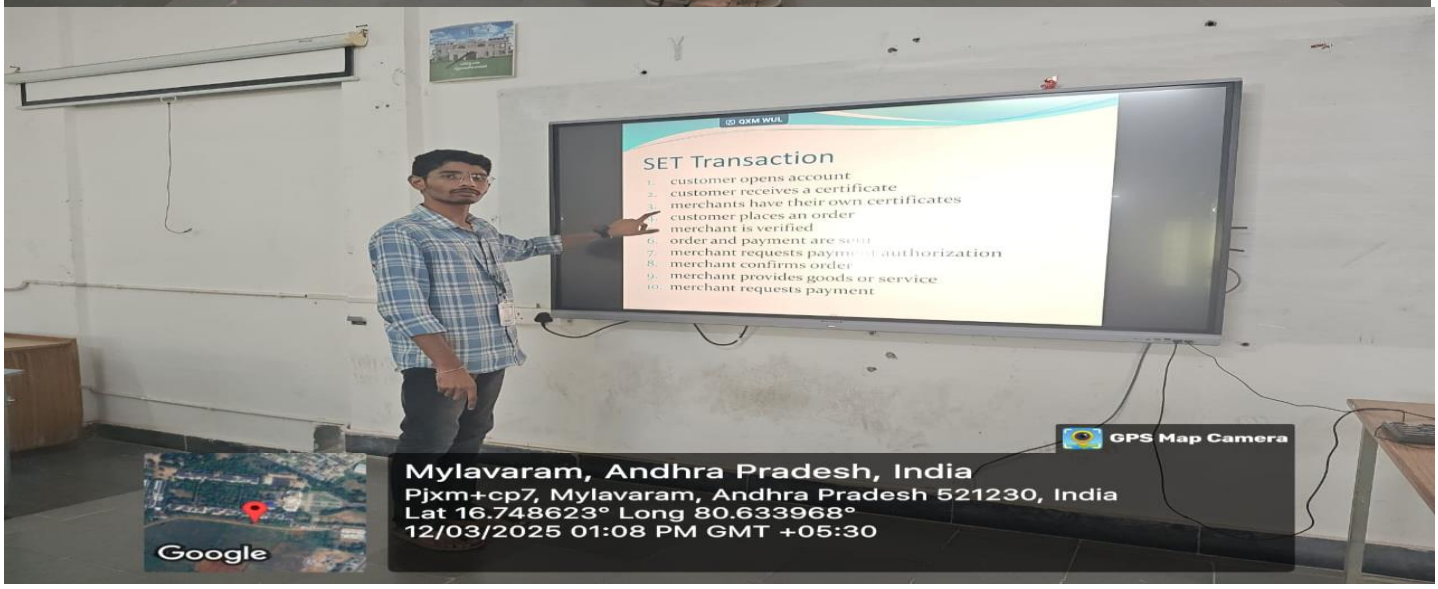


Activity Photos:









Course Instructor **Head of the Department**

T N V S Praveen **Dr.D.Veeraiah**

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(An Autonomous Institution since 2010)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018, 14001:2015, 50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details:

Course Name:	**Information Security**
Course Code:	**20CS17**
Branch/Sem/Section:	**CSE /VI /B**
Academic Year:	**2024-25**
Faculty Name:	**T N V S Praveen**
Topic Selected:	**Phishing simulation**
Date of Activity:	**10-01-2025**

1. Selection of activity:

   In my course, I plan to conduct Phishing simulation in the context of activity-based learning refers to using simulated phishing attacks as an educational tool to teach individuals, especially in organizations, how to recognize and respond to phishing attempts.

2. Outcomes associated with Phishing simulation activity:

   The outcomes of phishing simulation in activity-based learning are typically focused on increasing participants' awareness, improving their skills in identifying phishing attempts, and enhancing overall cybersecurity behavior.

3. Objectives of Phishing simulation activity:

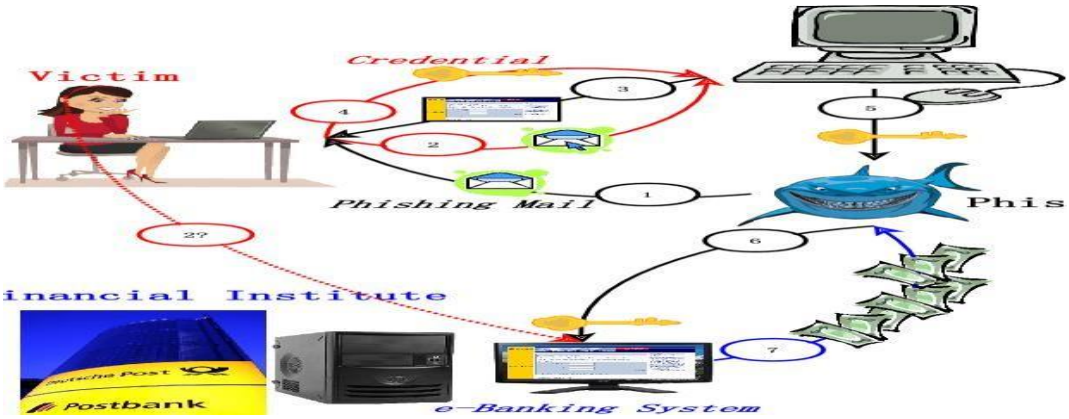
   The main objectives of collaborative activity are listed as follows. Raise Awareness About Phishing and Cybersecurity Threats

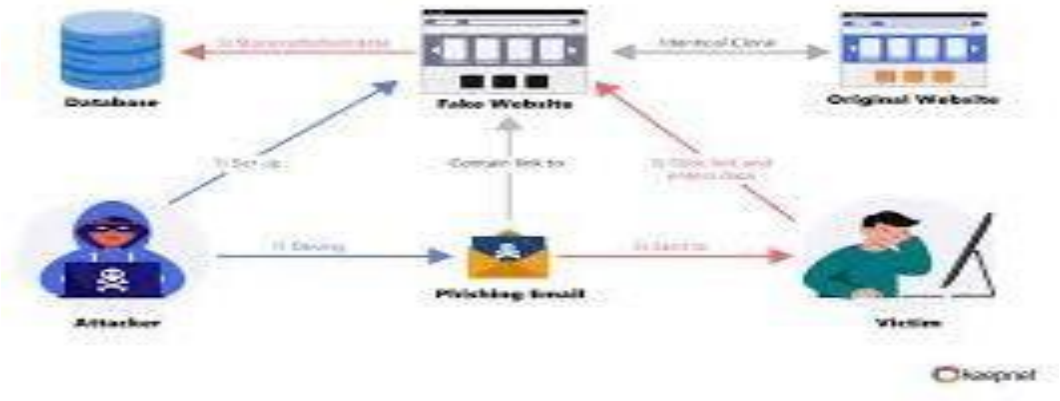
   - Enhance the Ability to Identify Phishing Attempts
   - Promote Safe Online Behavior and Practices

4. Step-by-step procedure to conduct an activity:
   - Define Learning Objectives
   - Set Up the Simulation Environment
   - Introducing the Concept of Phishing
   - Explain the Rules and Expectations
   - Conduct the Phishing Simulation

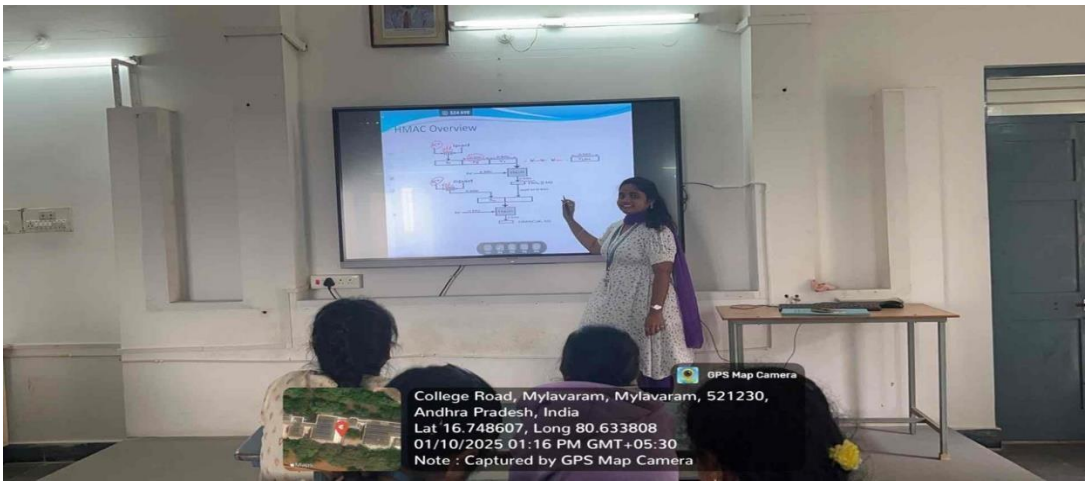
- Analyze and Discuss the Simulation Results
- Conduct a Knowledge Check (Optional)
- Provide Resources for Continued Learning
- Evaluate and Improve

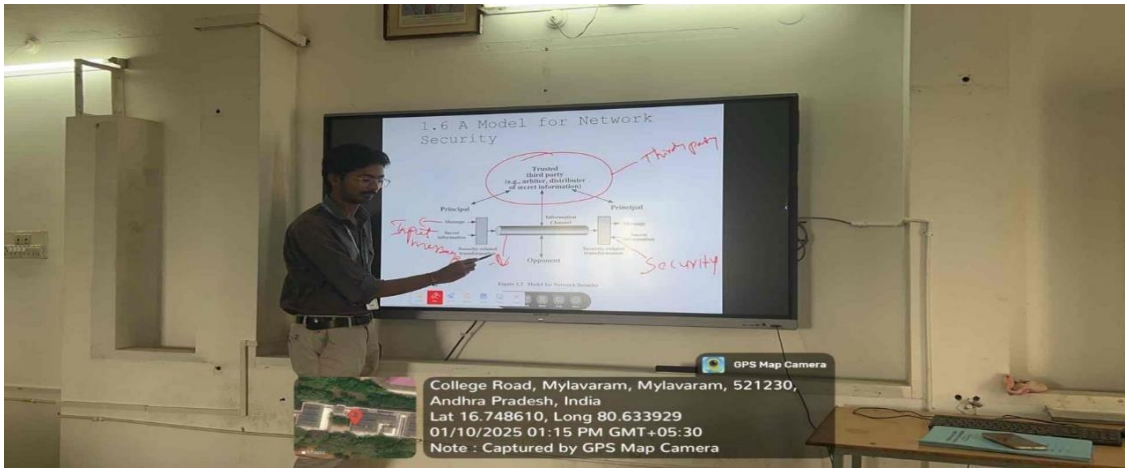
5. Sample diagrams for **Phishing Simulation**:





Activity Photos:





Course Instructor **Head of the Department**

T N V S Praveen **Dr.D.Veeraiah**

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details:

Course Name:	Big Data Analytics
Course Code:	20CS19
Branch/Sem/Section:	CSE /III /A
Academic Year:	2024-25
Faculty Name:	D. Anil kumar
Topic Selected:	Map Reduce
Date of Activity:	04-01-2025

1. **Selection of activity:**

In my course, to conduct an active learning work, I plan to conduct **"Seminar".** This helps students in achieving objectives by improving individual presentation and analysis skills.

2. **List of outcomes associated with activity:**

In my course, the following outcomes are associated with the selected activity.

- Demonstrate Moves data between relational databases and Hadoop.
- To coordinate distributed processes and services

3. **Objectives of activity:**

This seminar aims to:

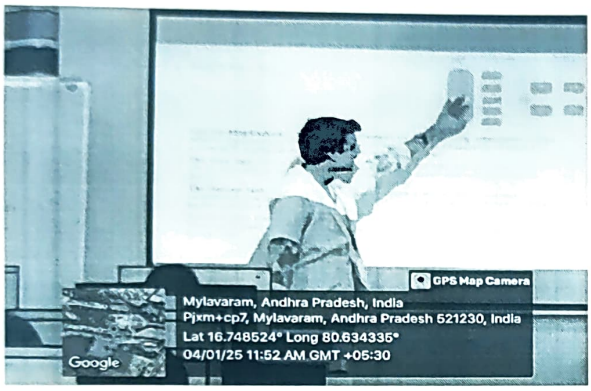
- Introduce peers to **big data challenges** and explain why traditional data processing techniques struggle with huge datasets.
- Explain the **working of the MapReduce model** in simple terms — focusing on the roles of the **Mapper** and **Reducer**.
- Show how Hadoop uses MapReduce to **process data in parallel across multiple machines**.
- Provide **simple examples or case studies** that students can relate to, making the concept easier to understand.

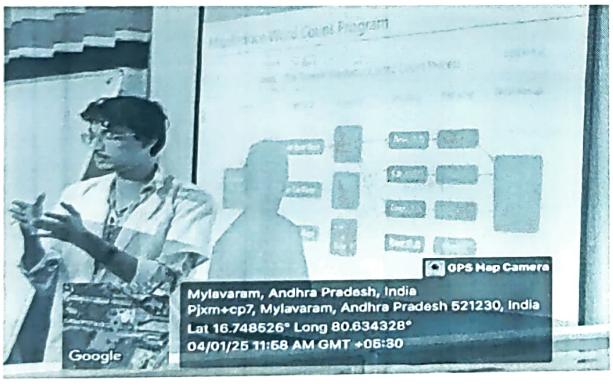
- Encourage interactive discussion where students can **ask questions, share thoughts**, and **clarify doubts** on big data and MapReduce.

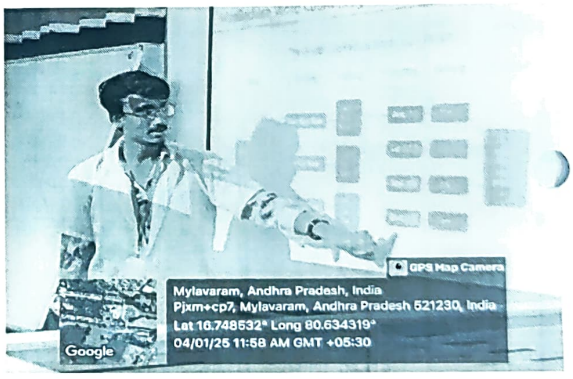
4. Details of participants in Seminar / Role-Play

S.no	Roll number	Name	Topic
1	22761A0517	G.Pavanesh	MapReduce

5. Activity Photos:







Course Instructor

Head of the Department

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details:

Course Name:	BigData Analytics
Course Code:	20CS19
Branch/Sem/Section:	CSE /VI /B
Academic Year:	2024-25
Faculty Name:	Dr.K DeviPriya
Topic Selected:	CasStudy
Date of Activity:	7-1-2025

1. **Selection of activity:**

   - Analyzed the research paper A dynamic repository approach for small file management with fast access time on Hadoop cluster: hash based extended Hadoop archive , Hadoop Perfect File: A fast and memory-efficient metadata access archive file to face small files problem in HDFS for the concept of HAR-Archive

2. **Objectives of activity:**

   The main objectives of this activity are listed as follows. A learner able to:

   - Understand the importance of data archiving and its role in managing large datasets.
   - Learn about HAR-Archive (Hadoop Archive) and how it helps in handling small files efficiently in Hadoop clusters.
   - Explore different types of archives and use cases.

3. **List of outcomes associated with activity:**

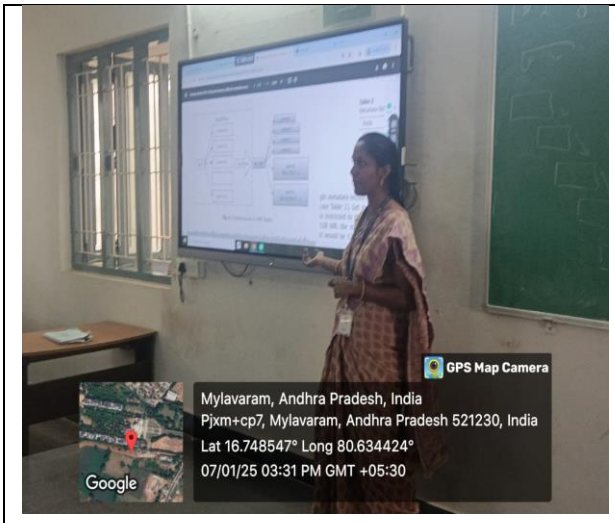
   - Gained knowledge about HAR-Archive and its role in managing small files efficiently in Hadoop clusters.
   - Understood the need for data archiving and how it improves storage and access time
   - Explored different types of archives, including HAR-Archive, TAR, ZIP, and others.

- Improved problem-solving skills by analyzing a technical research paper and discussing its real-world applications.

4. **Details of participants in technical problem-based learning activity**

All students were participated.

Activity Photos:



Dr.K DeviPriya **Dr.D.Veeraiah**

Course Instructor **Head of the Department**

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details:

Course Name:	BigData Analytics
Course Code:	20CS19
Branch/Sem/Section:	CSE /VI /B
Academic Year:	2024-25
Faculty Name:	Dr.K DeviPriya
Topic Selected:	Problem Based Solving
Date of Activity:	30-1-2025

1. **Selection of activity:**

   - A problem statement related to serialization is given and two students were formed as a group and completed the task.

2. **Objectives of activity:**

   The main objectives of this activity are listed as follows. A learner able to:

   - Understand the concept of serialization and its importance in data storage and transmission.
   - Implement serialization and deserialization in programming.
   - Explore different serialization techniques (e.g., JSON, XML, Protocol Buffers, etc.).
   - Enhance presentation and communication skills by explaining their solutions.

3. **List of outcomes associated with activity:**

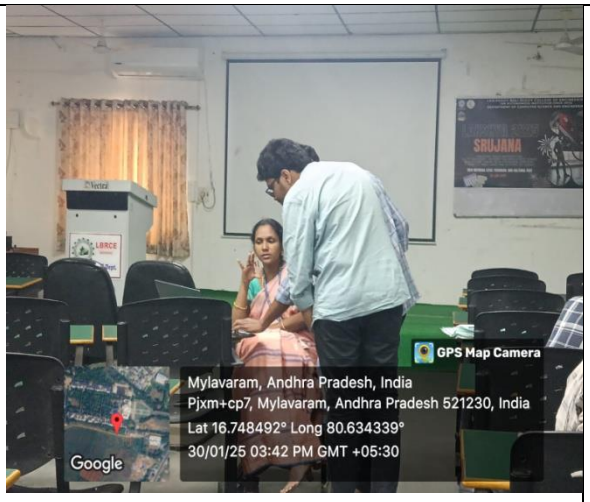
   - Gain a clear understanding of serialization and deserialization processes.

     Successfully implement serialization techniques in their respective programming languages.
   - Successfully implement serialization techniques in their respective programming languages.
   - Improve their ability to analyze and solve technical problems efficiently.

4. **Details of participants in technical problem-based learning activity**

   All students were participated.

Activity Photos:



Dr.K DeviPriya **Dr.D.Veeraiah**

Course Instructor **Head of the Department**

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING
(An Autonomous Institution since 2010)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018, 14001:2015, 50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details:

Course Name:	Big Data Analytics
Course Code:	20CS19
Branch/Sem/Section:	CSE /III /C
Academic Year:	2024-25
Faculty Name:	P.NAGABABU
Topic Selected:	Map Reduce
Date of Activity:	21-03-2025

1. **Selection of activity:**

In my course, to conduct an active learning work, I plan to conduct **"Seminar".** This helps students in achieving objectives by improving individual presentation and analysis skills.

2. **List of outcomes associated with activity:**

In my course, the following outcomes are associated with the selected activity.

- Demonstrate Moves data between relational databases and Hadoop.
- To coordinate distributed processes and services

3. **Objectives of activity:**

This seminar aims to:

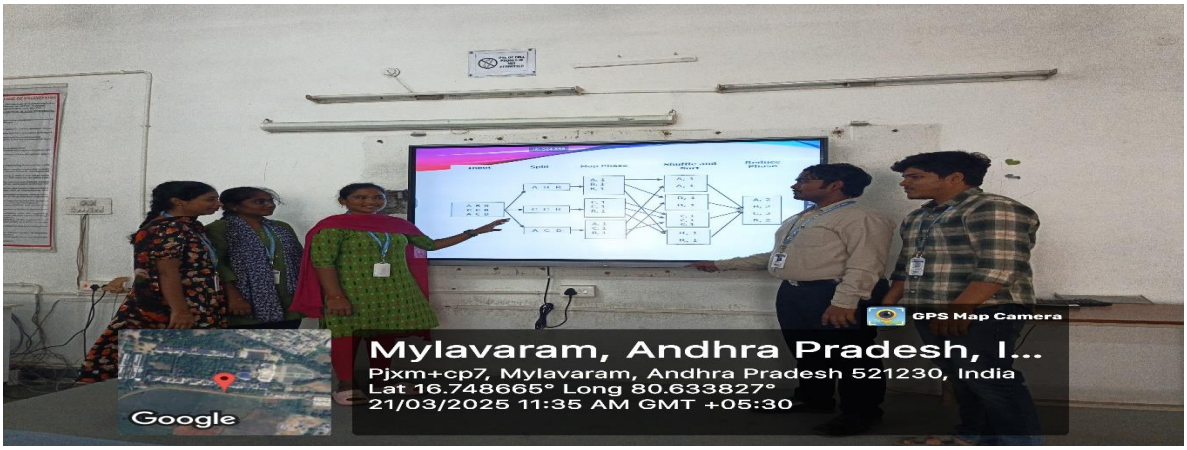
- Introduce peers to **big data challenges** and explain why traditional data processing techniques struggle with huge datasets.
- Explain the **working of the MapReduce model** in simple terms — focusing on the roles of the **Mapper** and **Reducer**.
- Show how Hadoop uses MapReduce to **process data in parallel across multiple machines**.

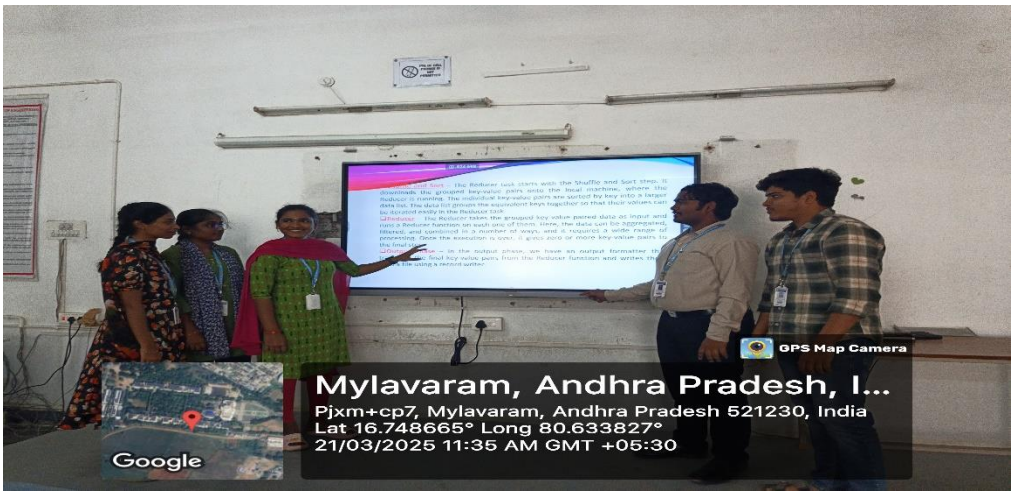
- Provide **simple examples or case studies** that students can relate to, making the concept easier to understand.
- Encourage interactive discussion where students can **ask questions, share thoughts**, and **clarify doubts** on big data and MapReduce.

4. Details of participants in Seminar / Role-Play

S.no	Roll number	Name	Topic
01	22761A05E2	C.YASWANTH	MapReduce
02	22761A05G9	M DEEPTHI	
03	22761A05D3	A PRASANNATHA	
04	22761A05G8	M PRANEETH	
05	22761A05H6	N GREESHMA SRI	

5. Activity Photos:





Course Instructor **Head of the Department**

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details:

Course Name:	Data Analytics and Visualization Lab
Course Code:	20CS62
Branch/Sem/Section:	CSE /VI /B
Academic Year:	2024-25
Faculty Name:	Dr.K DeviPriya
Topic Selected:	Problem Solving- MapReduce Approach
Date of Activity:	23-1-2025

1. **Selection of activity:**

Two problems are given to students to perform analytics using the Map-Reduce approach:

- Matrix Multiplication
- Weather Report Analysis

2. **Objectives of activity:**

The main objectives of this activity are listed as follows. A learner able to:

- Perform data analysis on large datasets using the MapReduce approach.
- Understand and implement Matrix Multiplication using MapReduce.
- Analyze and generate insights from **weather data** using MapReduce.

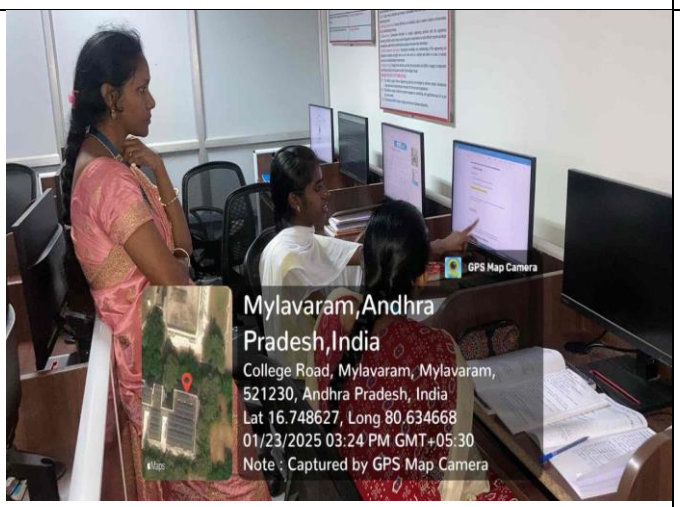
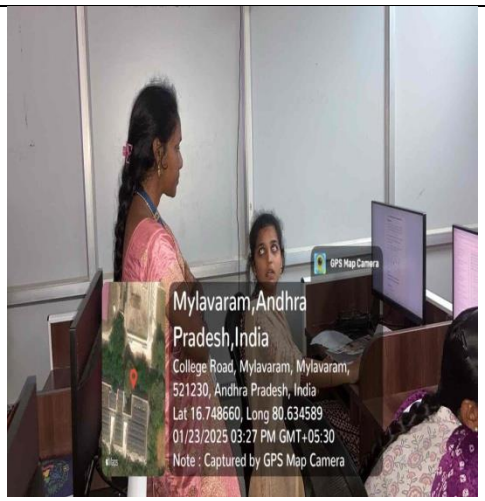
3. **List of outcomes associated with activity**

- Analyze and generate insights from weather data using MapReduce.
- Implement Matrix Multiplication using the MapReduce approach for efficient large-scale computation.
- Analyze and process weather data to extract meaningful insights, such as max temperature, min temp.
- Enhance collaborative learning through discussions and teamwork in solving analytical problems.

4. **Details of participants in technical problem-based learning activity**

All students were participated.

Activity Photos:

<table>
<tr>
<td> 
</td>
<td> 
</td>
</tr>
<tr>
<td> 
</td>
<td> 
</td>
</tr>
</table>

Dr.K DeviPriya **Dr.D.Veeraiah**

Course Instructor **Head of the Department**

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details:

Course Name:	Compiler Design
Course Code:	20CS18
Branch/Sem/Section:	CSE /VI/A
Academic Year:	2024-25
Faculty Name:	B. Swathi
Topic Selected:	Phases of Compiler
Date of Activity:	24 January 2025
Activity Name	A Poster-Based Learning Session on Phases of a Compiler

1. **Selection of activity:**

In my course, I plan to implement a "Poster-Based Learning Session on Phases of a Compiler" has been chosen as a key activity in the course to promote active learning and visual engagement among students. Understanding the different phases of a compiler—from lexical analysis to code generation—is crucial for grasping the core concepts of compiler design. By utilizing posters as a learning medium, this activity enables students to break down these complex stages into digestible visual components, fostering deeper comprehension through creativity and presentation

2. **List of outcomes associated with activity:**

In my course, the "Poster-Based Learning Session on Phases of a Compiler" will improve individual and teamwork skills by encouraging collaboration and responsibility sharing. The activity enhances communication skills as students present and explain complex concepts. Additionally, it helps develop report writing skills through poster creation and written explanations. Ethical values are reinforced as students adhere to academic integrity and respectful collaboration. These outcomes equip students with essential skills for both academic and professional growth.

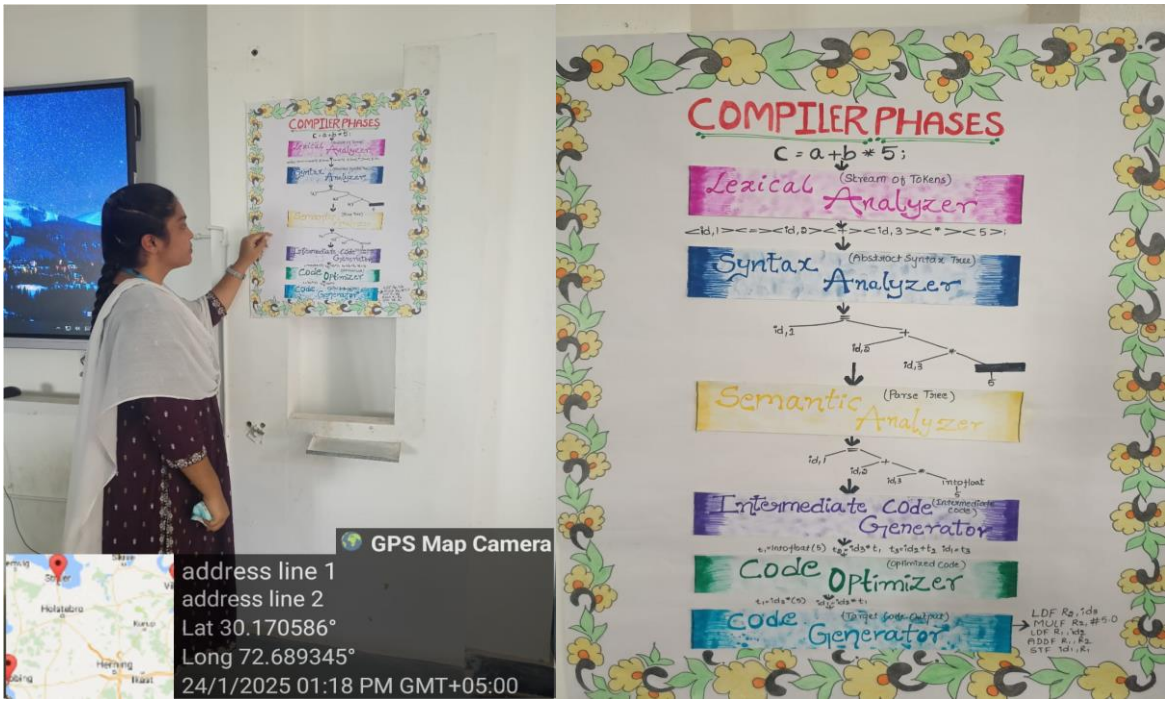
3. **Objectives of activity:** The primary objectives of this activity are as follows. Upon completion, learners will be able to:

- Enhance their interpersonal communication skills.
- Gain in-depth knowledge of the topic."
- Develop teamwork and collaboration Skills
- Improve visual presentation of complex ideas

4. **Details of participants in Seminar**

S.no	Roll number	Name	Topic
1	21761A0541	PALLE AKHILA	Phases of Compiler

Activity Photos:



Course Instructor **Head of the Department**

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details:

Course Name:	Compiler Design
Course Code:	2OCS18
Branch/Sem/Section:	CSE /III /A
Academic Year:	2024-25
Faculty Name:	Swathi.B
Topic Selected:	Exploring Online Learning Materials
Date of Activity:	22/03/2025

1. **Selection of activity:**

   To introduce different online learning materials for III-year students conducted the **Quiz on Quizizz online platform.** It creates healthy competition among students and creates interest towards exploring different online learning materials.

2. **List of outcomes associated with activity:**

   In my course the following outcomes are associated with the selected activity.
   - Self-assessment on the completed topics.
   - Improve competence in the subject.

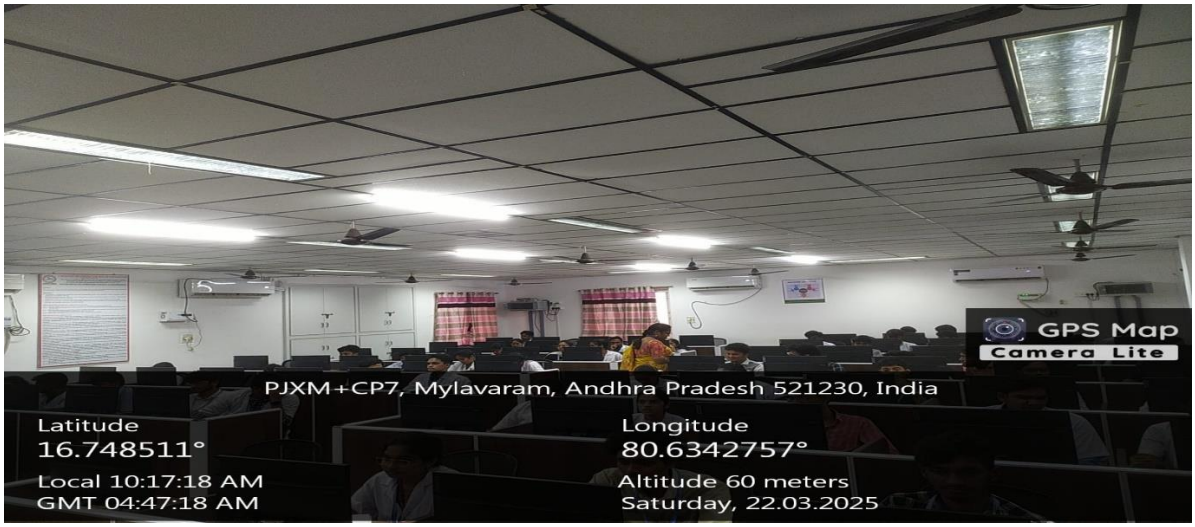
3. **Objectives of activity:**

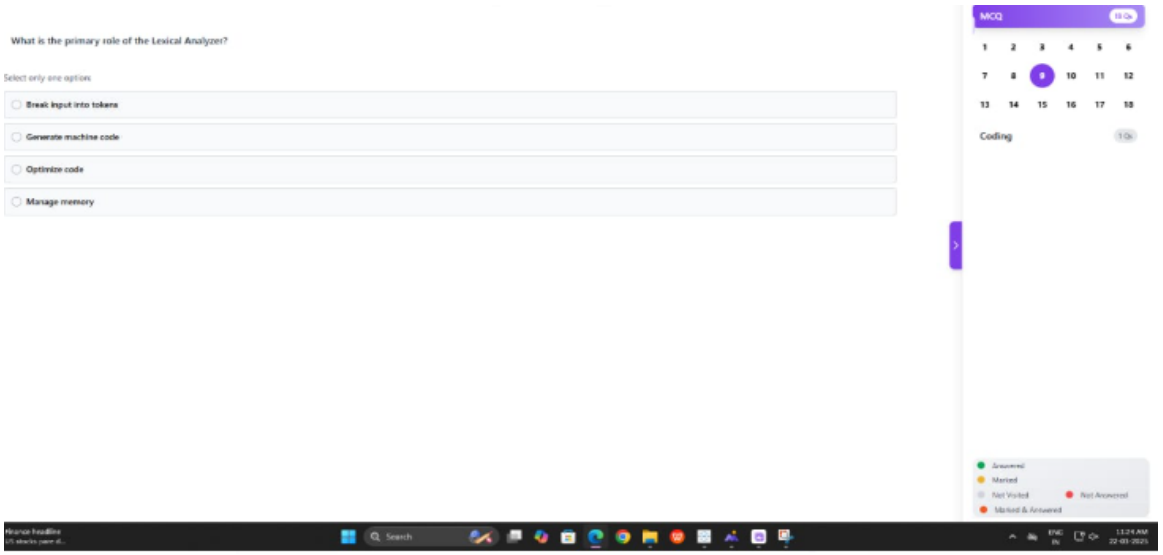
   The main objectives of this activity are listed as follows. A learner able to:
   - Develop interpersonal communication.
   - Improves the learning skills.
   - Acquire specific knowledge on the topic.

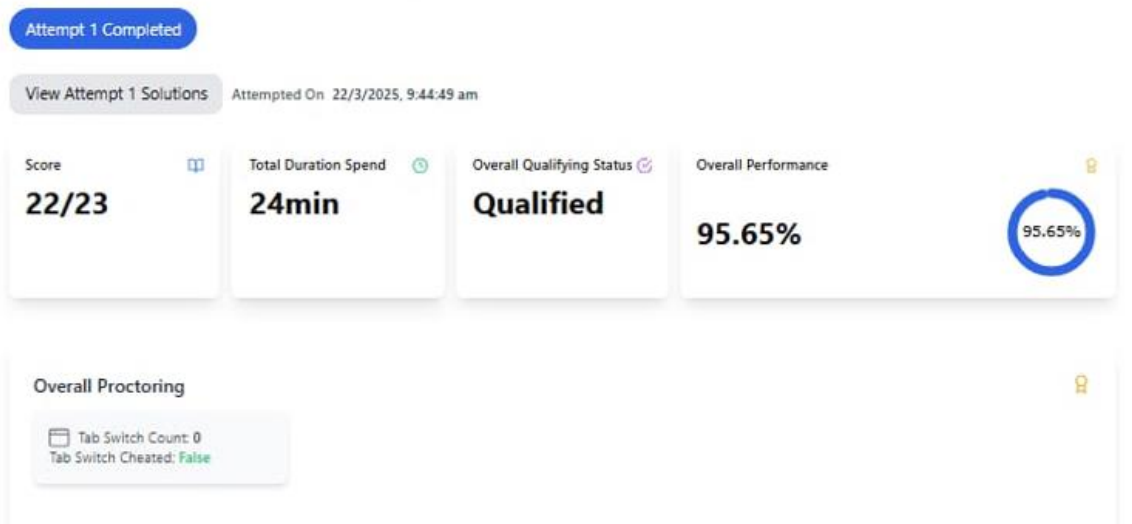
4. **Details of participants in Quiz**

   All the Third -year students from CSE-A Section

5. Activity Photos:







Winners of the Quiz

Sno	Roll Number	Name of the Student	Position
1	23765A0505	SUDULAGANTI SUCHITRA	1st Position
2	22761A0521	GUNTAKA RAJA SHEKAR REDDY	2nd Position
3	22761A0520	GUNTAKA SUMANTH REDDY	3rd Position

B. Swathi **Dr. D. Veeraiah**

Course Instructor **Head of the Department**

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details:

Course Name:	Information Retrieval Systems
Course Code:	20CS25
Branch/Sem/Section:	CSE /VI /C
Academic Year:	2024-25
Faculty Name:	B. Usha Rani
Topic Selected:	Search Engines used for Information Retrieval
Date of Activity:	23-12-2024

1. **Selection of activity:**

   In my course, to conduct an active learning work, I plan to conduct "Seminor". This helps students in achieving objectives by improving individual presentation and analysis skills.

2. **List of outcomes associated with activity:**

   In my course, the following outcomes are associated with the selected activity.

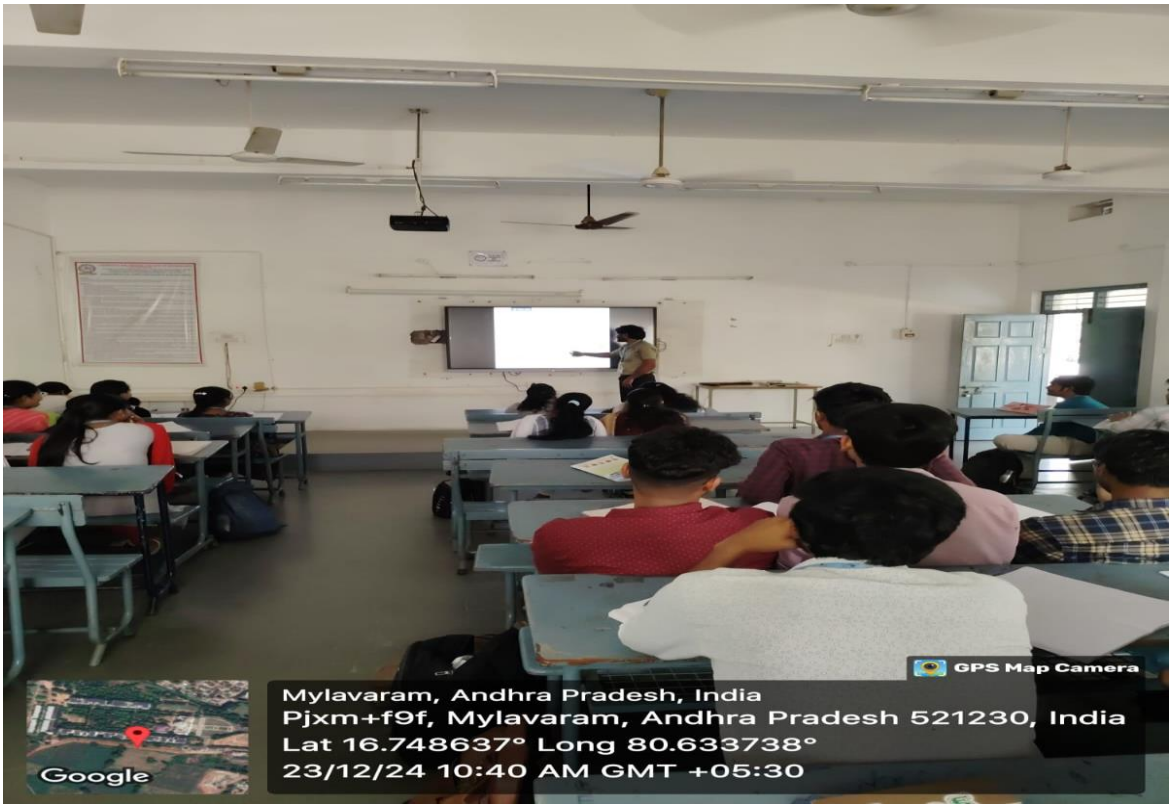
3. **Objectives of activity:**

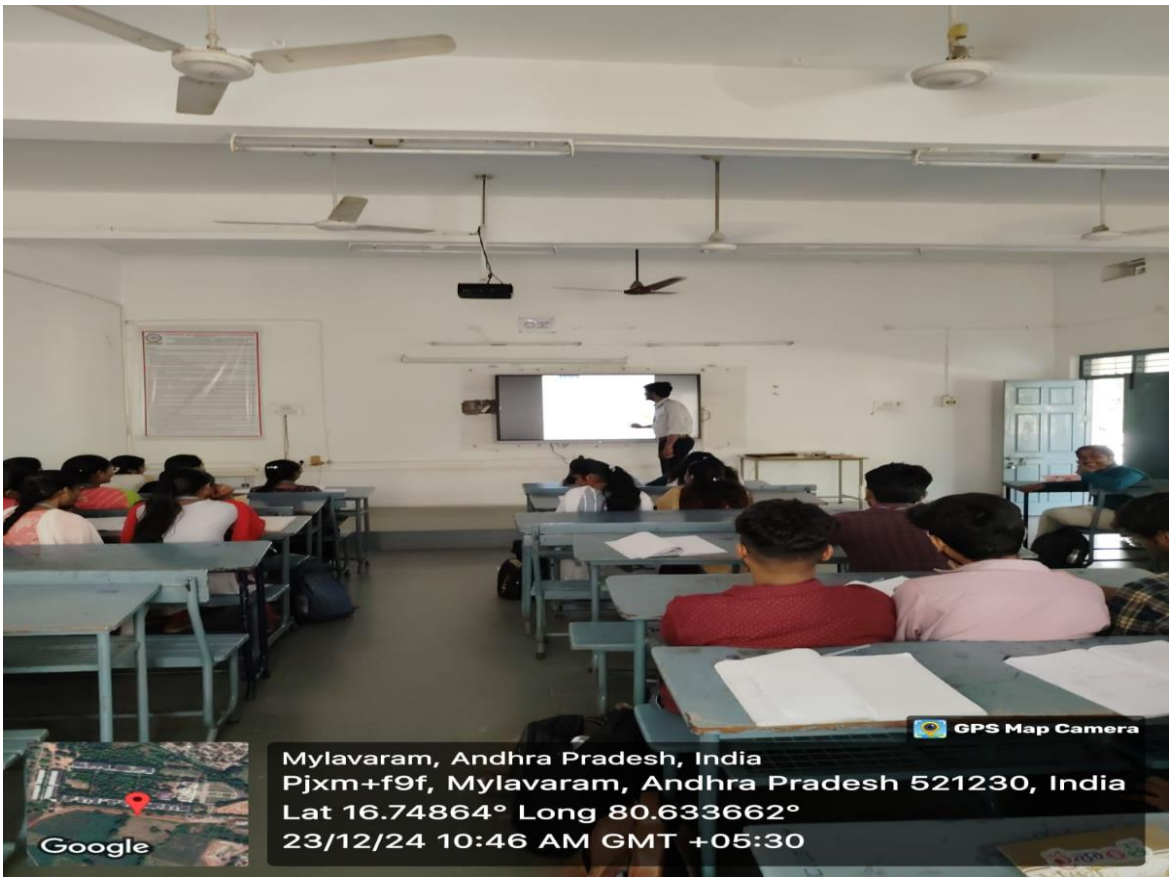
   The main objectives of this activity are listed as follows. A learner able to:

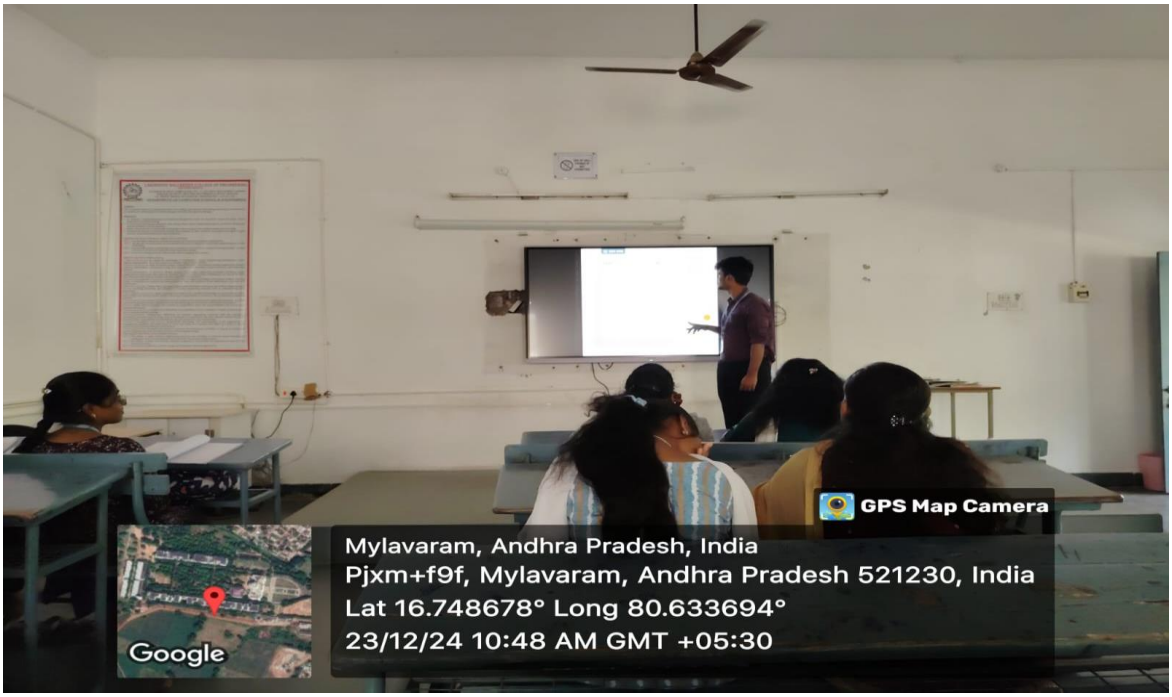
4. **Details of participants in Seminar :**

S.no	Roll number	Name	Topic
1	22761A05E2	Ch.Yashwanth	Web Search Engines
2	22761A05E5	J.Surya	Enterprise Search Engines
3	22761A05F3	K.Mohith	Desktop Search Engines
4	22761A05F5	K.Dinesh	Open-Source Search Engines

5. Activity Photos:







Course Instructor **Head of the Department**

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details:

Course Name:	Information Retrieval Systems
Course Code:	20CS25
Branch/Sem/Section:	CSE /VI /C
Academic Year:	2024-25
Faculty Name:	B. Usha Rani
Topic Selected:	Search Engines used for Information Retrieval
Date of Activity:	31-12-2024

1. **Selection of activity:**

   In my course, to conduct an active learning work, I plan to conduct "Seminor". This helps students in achieving objectives by improving individual presentation and analysis skills.

2. **List of outcomes associated with activity:**

   In my course, the following outcomes are associated with the selected activity.

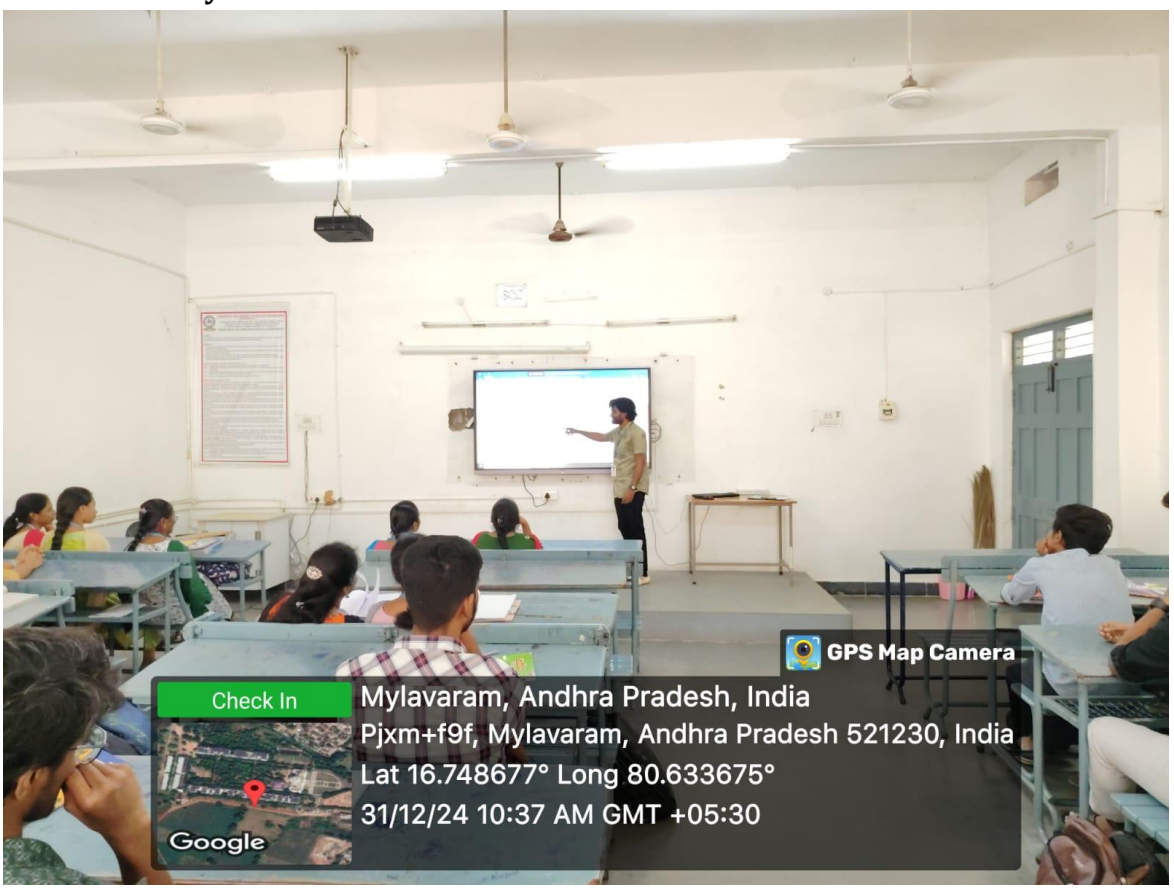
3. **Objectives of activity:**

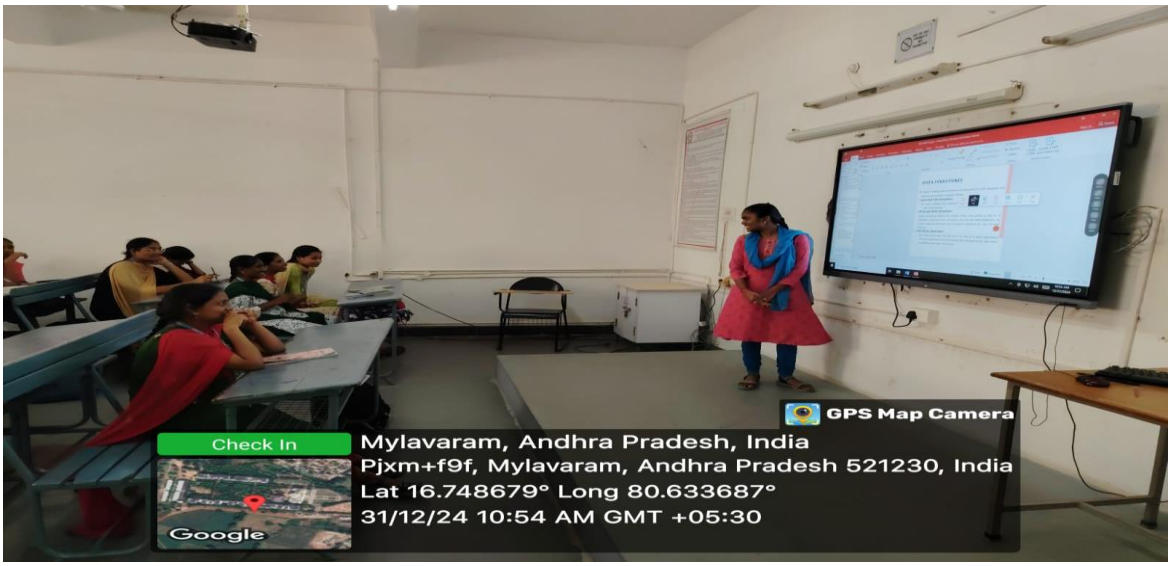
   The main objectives of this activity are listed as follows. A learner able to:

4. **Details of participants in Seminar :**

S.no	Roll number	Name	Topic
1	22761A05F5	K.Dinesh	How enterprise search differs from web search
2	22761A05F0	G.Divya	Precision vs. recall in manual vs. automated search
3	22761A05H1	M.Navya Sree	How to improve ranking algorithms
4	23765A0513	A.Sai	Role of AI in search (e.g., ChatGPT, BERT, semantic search)
5	23765A0516	J.Balaji Gopi Naik	Improving product search using NLP and machine learning

5. Activity Photos:





Course Instructor **Head of the Department**

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details:

Course Name:	Information Retrieval Systems
Course Code:	20CS25
Branch/Sem/Section:	CSE /VI /C
Academic Year:	2024-25
Faculty Name:	B. Usha Rani
Topic Selected:	Case Studies on Various Search Engines and Algorithms.
Date of Activity:	24-01-2025

1. **Selection of activity:**

   In my course, to conduct an active learning work, I plan to Give "Case study". Case studies help bridge the gap between **theory and practice** by showcasing real-world scenarios where IR systems are used and understanding and evaluating Information Retrieval (IR) systems because they provide **real-world applications, insights, and problem-solving strategies**..

2. **List of outcomes associated with activity:**

   In my course, the following outcomes are associated with the selected activity.

3. **Objectives of activity:**

   The main objectives of this activity are listed as follows. A learner able to:

4. **Details of participants in Seminar :**

S.no	Roll number	Name	Topic
1	22761A05E9	G.M.Suraj Baba	Google Search Engine
2	22761A05F5	K.Dinesh	Flipkart's Data retrieval Algorithms

5. Activity Photos:

CASE STUDY : GOOGLE SEARCH ENGINE

1.Introduction:

Google Search has been the cornerstone of information retrieval since its launch in 1998. This case study explores the algorithms used in its early days, traces its journey of optimization and improvement, and highlights the latest advancements in search technology.

Fig1.1: Google search today

Fig 1.2 Google search 1998

G.MURALI BABA 22761A05E9

1.1.Search Engine

A search engine is a software system designed to search for information on the internet. It processes user queries by indexing vast amounts of web content and retrieving the most relevant results. Search engines like Google utilize web crawlers to collect and index data from web pages and apply algorithms to rank the results based on relevance, quality, and user intent. Examples of popular search engines include Google, Bing, Yahoo, and DuckDuckGo.

1.2. SEO(Search Engine Optimization)

Search Engine Optimization is the practice of optimizing web content and structure to improve its visibility on search engines like Google. SEO involves techniques such as keyword optimization, creating quality content, improving page load speed, and acquiring backlinks, ensuring that a website ranks higher for relevant queries and attracts more organic traffic.

2.Evolution overtime:

Over the years, Google Search has undergone a significant transformation, adapting to the dynamic needs of users and the technological landscape. It started with PageRank, emphasizing link analysis, and evolved to include Universal Search, which integrated diverse content types like images and videos. The introduction of AI-driven algorithms, such as RankBrain and BERT, marked a shift towards understanding user intent and context. With advancements like mobile-first indexing, real-time updates, and improved voice search capabilities, Google has consistently prioritized relevance, speed, and accessibility, maintaining its position as the world's leading search engine.

2.1: Page Rank Algorithm

PageRank was the foundational algorithm that powered Google Search during its inception. It measures the importance of web pages based on the number and quality of links pointing to them. The underlying idea is that links act as "votes" of trust, with a higher weight assigned to pages linked by other reputable sources.

Key Features of PageRank:

- **Link Analysis**: Evaluates the quantity and quality of inbound links.
- **Damping Factor**: Introduces a probability factor that a user randomly jumps to another page, ensuring no single page dominates.

G.MURALI BABA 22761A05E9

- **Iterative Calculation**: Repeatedly updates rankings until they converge to stable values.

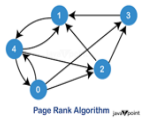


Fig 2.2:Page Rank Algorithm

2.2: RankBrain

Introduced in 2015, RankBrain is an AI-driven algorithm that dynamically adjusts search results based on user behavior and query patterns. It uses machine learning to interpret ambiguous and long-tail queries effectively.

- **BERT**: Launched in 2019, BERT (Bidirectional Encoder Representations from Transformers) enhances understanding of search intent by analyzing the context of words in a query. This is particularly useful for conversational searches and queries with prepositions that alter meaning.
- **Contextual Understanding**: Recognizes nuances in queries, improving accuracy.
- **Global Impact**: Supports multiple languages, making search more inclusive.
- **User-Centric**: Prioritizes relevance and user intent over exact keyword matches.

G.MURALI BABA 22761A05E9

INTRODUCTION

Information Retrieval Systems (IRS) have become an integral part of modern appli-cations, particularly in the e-commerce domain. These systems are employed across various platforms, including mobile applications, tablet interfaces, and desktop web-sites.

IRS plays a pivotal role in enhancing user experience by making navigation, search and filtering seamless and intuitive. A smooth and efficient user experience not only attracts more users but also retains them, fostering brand loyalty. As the number of users increases, the platform gains better visibility and recommendations, leading to significant financial growth.

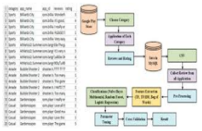
In the competitive e-commerce landscape, an effective IRS directly contributes to both user satisfaction and the company's revenue. This underscores its critical importance in driving the success of modern applications.

1

Flipkart's Data retrieval Algorithms

Sorting and filtering play a fundamental role in the efficient functioning of an Information Retrieval System (IRS), especially for e-commerce platforms like Flipkart. These mechanisms ensure that user-s can quickly navigate through a vast product catalog to find what they are looking for, while maintaining a seamless experience. Among the core algor-ithms employed, **Merge-Sort** and **Quick-Sort** stand out for their efficiency in handling large datasets. Merge-Sort, with its divide-and-conquer approach, is particularly useful when merging sorted data, such as combining results fr-om different categories or filters. Quick-Sort, on the other hand, is an in-pla-ce algorithm widely utilized for scenarios requiring faster sorting of products, such as arranging items by price or ratings.

Filtering relies heavily on structured data travers-al and manipulation. For instance, **Binary Search Trees (BSTs)** are used to organize products hierarchically, enabling efficient retrieval when filters like price range or brand are applied. Advanced tree structures like **AVL Trees** and **Red-Black Trees** ensure that the data remains balanced, facilitating quick updates and retrievals even when new products are added or prices change dynamically. **Tree traversal algorithms** such as inorder traversal are particularly effective for displaying products in sorted order, while preorder traversal is ideal for presenting hierarchical filter structures, like nested categories (e.g., Electronics > Smartphones > Samsung).



The use of **Priority Queues** in filtering allows Flipkart to prioritize results based on user preferences or system-defined metrics, such as relevance, popularity, or stock availability. Products can be dynamically arranged to reflect "Best Match" or "Most Relevant" options. Complementing this, **Skip Lists** offer a practical solution for dynamic filtering. They allow for rapid insertion, deletion, and searching of data, making them ideal for scenarios where filter conditions like price ranges or availability change frequently.

In text-based filtering, **Pattern Matching Algorithms** such as the **Knuth-Morris-Pratt** and **Boyer-Moore algorithms** are employed to search product descriptions and keywords efficiently. **Tries** and **Suffix Tries** are used to index product titles and descriptions, enabling fast and accurate prefix-based searches. These methods power advanced search functionalities, such as autocompletion and typo-tolerant searches.

Sorting and filtering often involve multi-level operatio-ns where various criteria are combined. For example, a user might want to filter products by brand and price, then sort the results by customer ratings. **Dynamic arrays and lists** are used to dynamically generate and manage su-ch filter combinations. Additionally, **Hash Tables** play a vital role in quickly looking up filter conditions when multiple filters are applied simultaneous-sly.

For user-specific filtering, adaptable data structures such as priority queues and sorted lists allow for personalized results. Filt-ers like "Trending in Your Area" or "Recommended for You" leverage user behaviour data to dynamically sort and display products. Furthermore, **gra-ph-based filtering** is utilized to represent complex relationships between fil-ters. Graph traversal techniques, like shortest-path algorithms, help in find-ing optimal results for filters such as "Fastest Delivery Options."

These sorting and filtering mechanisms collectively ensure that Flipkart's IRS delivers a fast, accurate, and user-friendly experi-ence, allowing users to find the most relevant products with minimal effort. By employing efficient algorithms and advanced data structures, Flipkart no-t only enhances user satisfaction but also strengthens its competitive edge in the e-commerce domain.

3

Flipkart using Scrapping:

Data Scraping in Flipkart's Information Retrieval System

Data scraping is a pivotal process in Flipkart's Information Retrieval System (IRS) as it facilitates the collection of large-scale, structured, and unstructured data from its e-commerce platform. This data is fundamental for enhancing user experience by powering features like search, sorting, filtering, and personalization. By automating the retrieval of data, scraping enables Flipkart to gather details about product listings, customer reviews, pricing trends, and availability status efficiently.

retrieved data is accurate and reliable for subsequent analysis. For example, when scraping product reviews, preprocessing removes duplicate reviews, spam, or irrelevant data, allowing Flipkart to derive meaningful insights into customer sentiment.

The scraped data is utilized in various ways to enhance the platform's Information Retrieval System. **Search and filtering mechanisms** heavily rely on this data to provide personalized and accurate results. For instance, when a user searches for "smartphones under ₹20,000," the system uses the scraped and indexed product details to display the most relevant results. Similarly, price tracking and historical trends are made possible through

Course Instructor **Head of the Department**

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

PROGRAM : **B.TECH-CSE-VI-SEM-C SEC**

ACADEMIC YEAR : **2024-25**

COURSE NAME & CODE : **SERVER-SIDE SCRIPTING LAB & 20CS63**

L-T-P STRUCTURE : **0-0-3**

COURSE INSTRUCTOR : **MRS.B. USHA RANI**

ACTIVITY : **WEB APPLICATION DEVELOPMENT USING PHP**

TITLE OF THE PROJECT : **"BLOOD BANK MANAGEMENT SYSTEM-BLOODBRIDGE"**

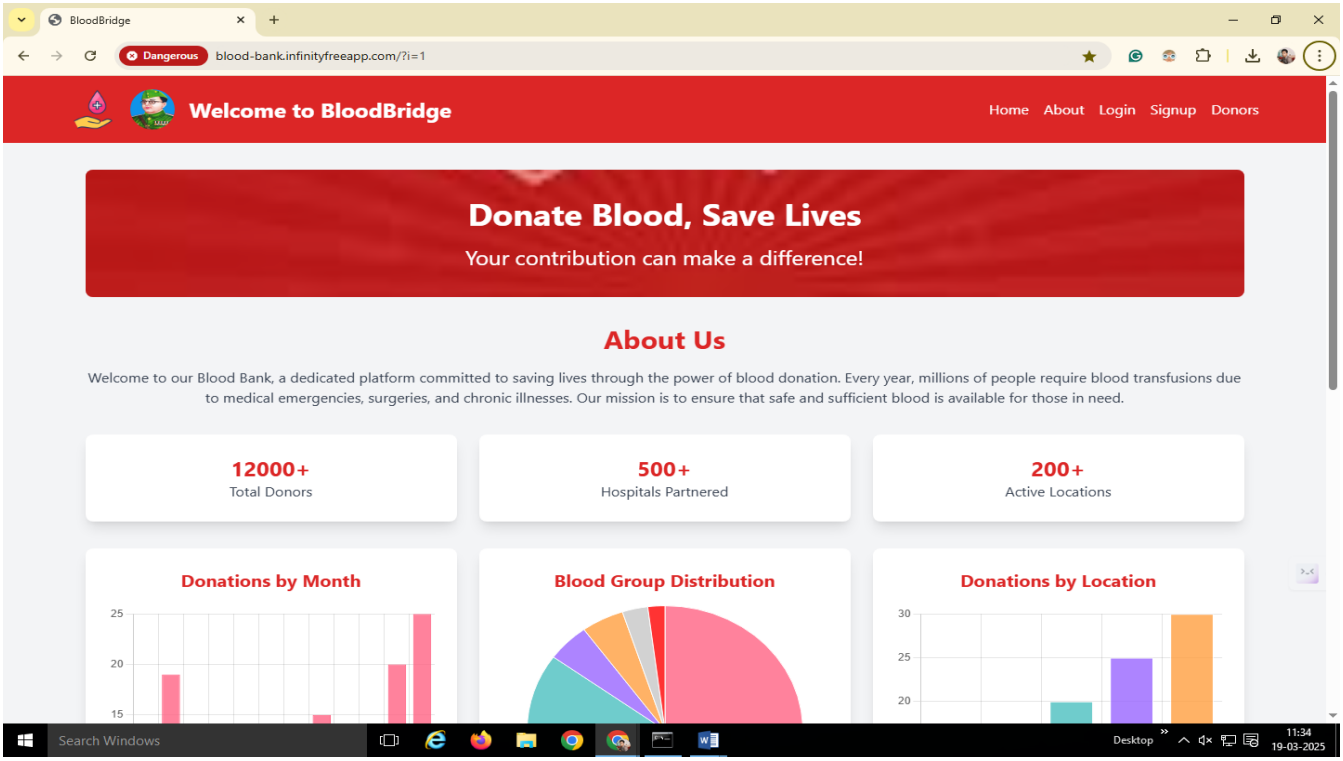
S.no	Roll Number	Names
1	22761A0530	K. Gopi Krishna

Abstract

The **BloodBridge** platform is a web-based Blood Bank Management System designed to facilitate blood donations, enhance donor engagement, and support hospitals in maintaining adequate blood supplies. Developed using PHP for backend processing and a responsive frontend, the system provides an intuitive interface for users to register, find donors, and track blood donation trends.

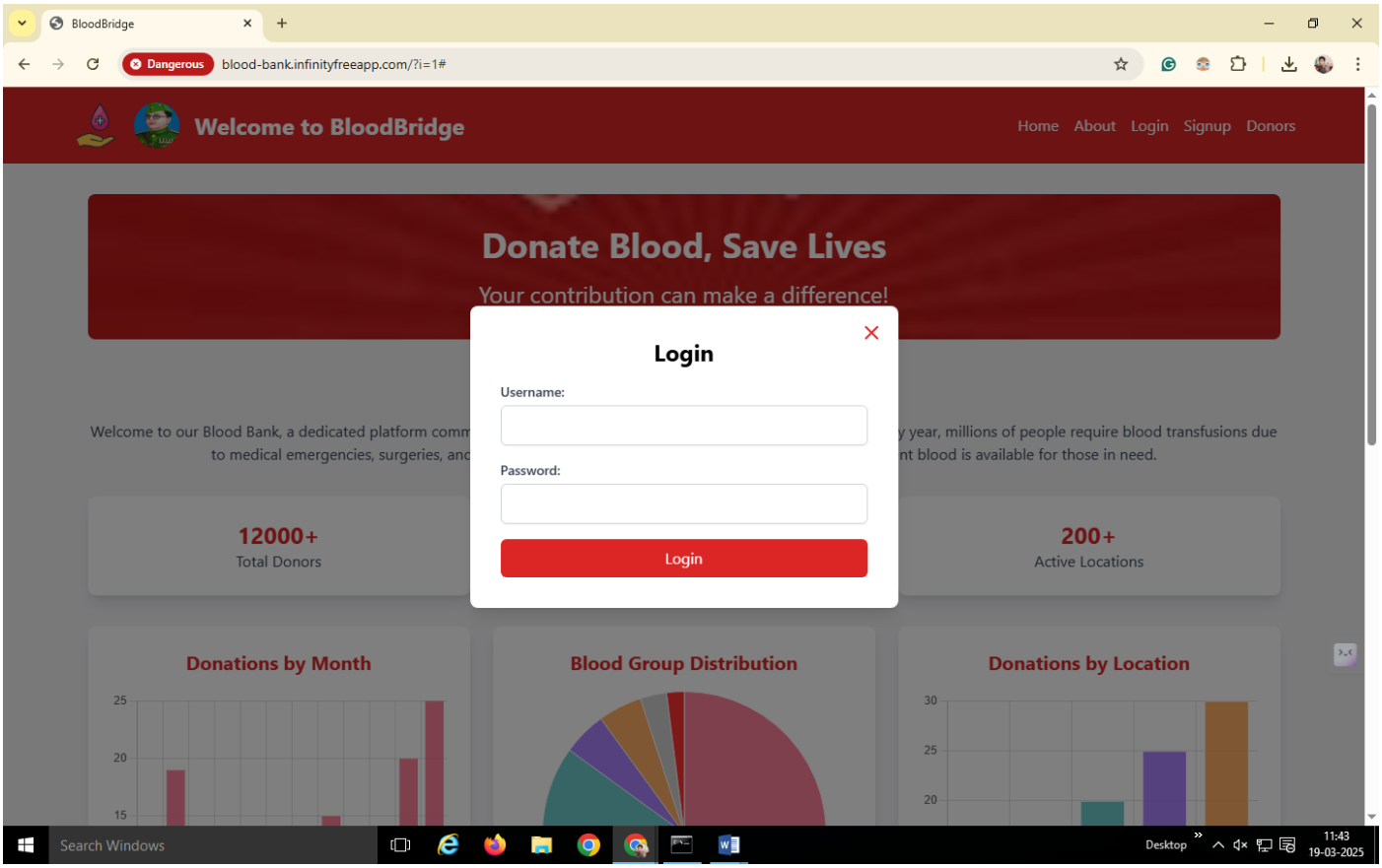
Introduction

The homepage features an interactive dashboard displaying key statistics, including total donors, partnered hospitals, and active locations. Graphical representations of blood group distributions and donation trends enhance data visualization. The platform emphasizes ease of access through login and signup options, ensuring a secure and user-friendly experience.By streamlining donor management and donation tracking, this system plays a crucial role in addressing blood shortages and improving medical response efficiency. The implementation of PHP and a structured database ensures reliable performance and scalability, making it a robust solution for blood donation management.



- The **BloodBridge** home page is designed to create awareness about blood donation and engage donors effectively.The **header section** displays the BloodBridge logo along with navigation links such as Home, About, Login, Signup, and Donors. A user profile icon is also available for logged-in users. The **banner section** features the slogan "Donate Blood, Save Lives," encouraging users to participate in blood donation efforts.
- The **About Us section** highlights the mission of BloodBridge, which is to facilitate blood donations and ensure an adequate blood supply for medical emergencies, surgeries, and chronic illnesses. To provide important insights, key statistics are prominently displayed, including over 12,000 total donors, 500+ partnered hospitals, and 200+ active locations.
- The home page includes **data visualizations** that present blood donation trends. A bar chart illustrates donations by month, a pie chart shows blood group distribution, and another graph highlights donations by location. These visual elements help users understand donation patterns and encourage participation.
- The **footer section** may include contact details, social media links, FAQs, and policy-related information to assist users in navigating the platform.
- The **technologies used** in developing this platform include HTML, CSS, and JavaScript for the front end. The back end is powered by PHP, which manages user authentication and interactions, while MySQL is used for storing donor details and donation statistics.

The primary **purpose** of the home page is to provide quick access to essential blood donation information, encourage user sign-ups for donation participation, and present data-driven insights to raise awareness about the importance of blood donation. The structured design ensures an intuitive and informative user experience.



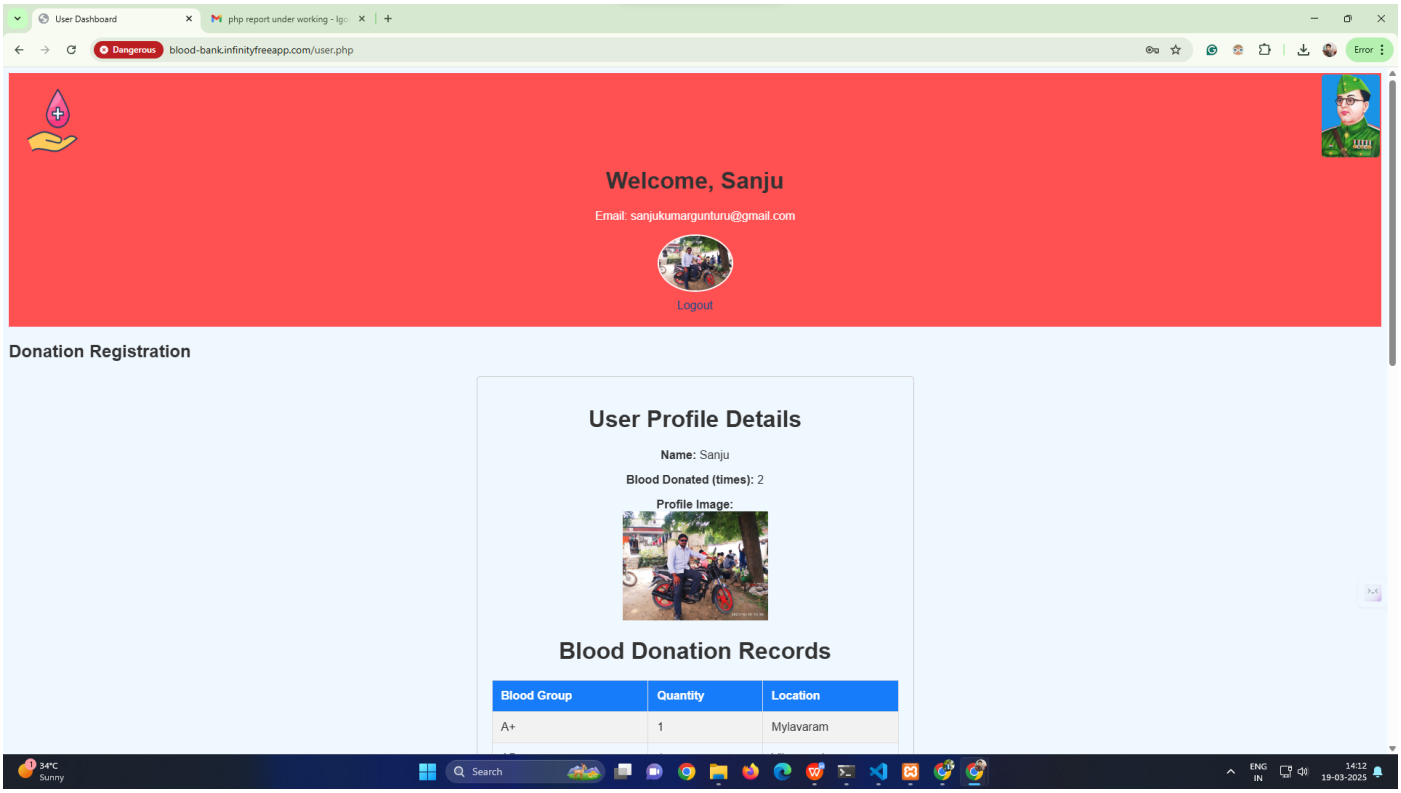
The **Login and Signup** functionalities in BloodBridge allow users to access the platform securely and register as donors or recipients. These features ensure that only authorized users can participate in blood donation activities and access relevant information. The **Login Page** provides a form with fields for email/username and password, where users must enter the correct credentials to access their accounts. It also includes a "Forgot Password?" option for password recovery and utilizes PHP for authentication along with MySQL for user data verification.

The **Signup Page** allows new users to register by filling in details such as full name, email, phone number, blood group, location, and password. Some fields require validation to ensure data accuracy, and passwords are securely hashed before storage in the database. After successful registration, users can log in and access their profiles.

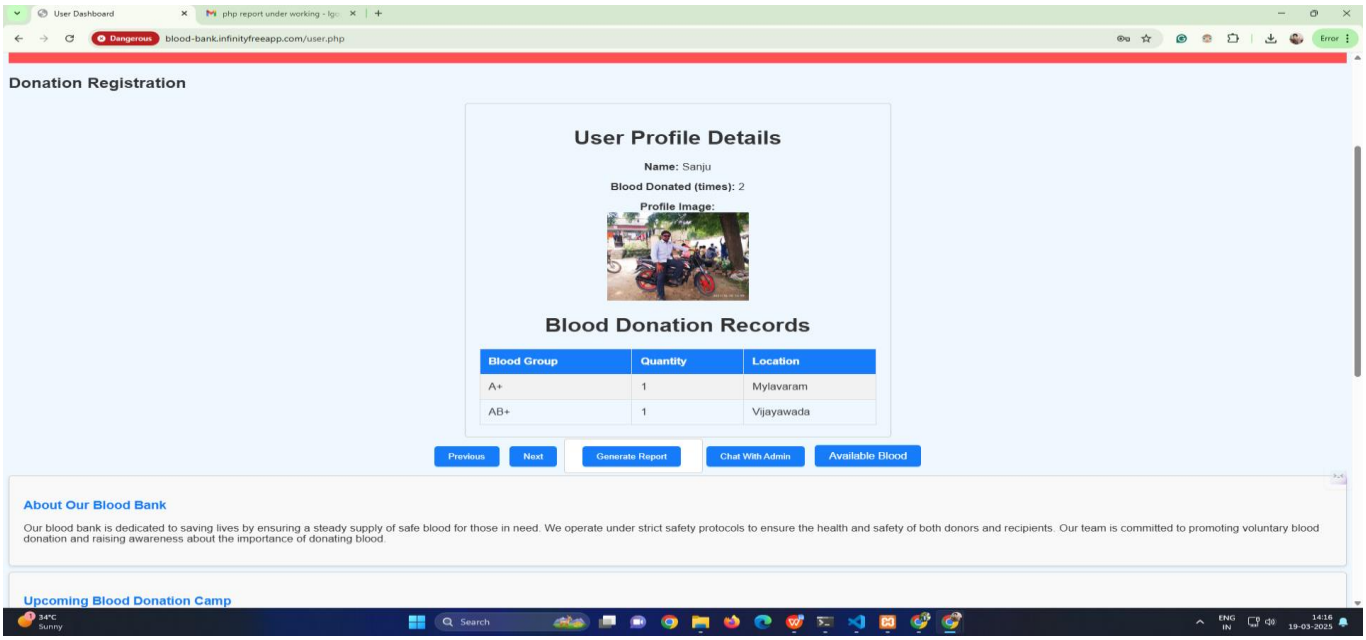
Key Features

- Secure user authentication and data validation
- Password encryption for enhanced security
- Account recovery option through "Forgot Password"
- Role-based access for donors and recipients

These features help in managing users effectively, ensuring data security, and facilitating smooth interactions within the BloodBridge platform.



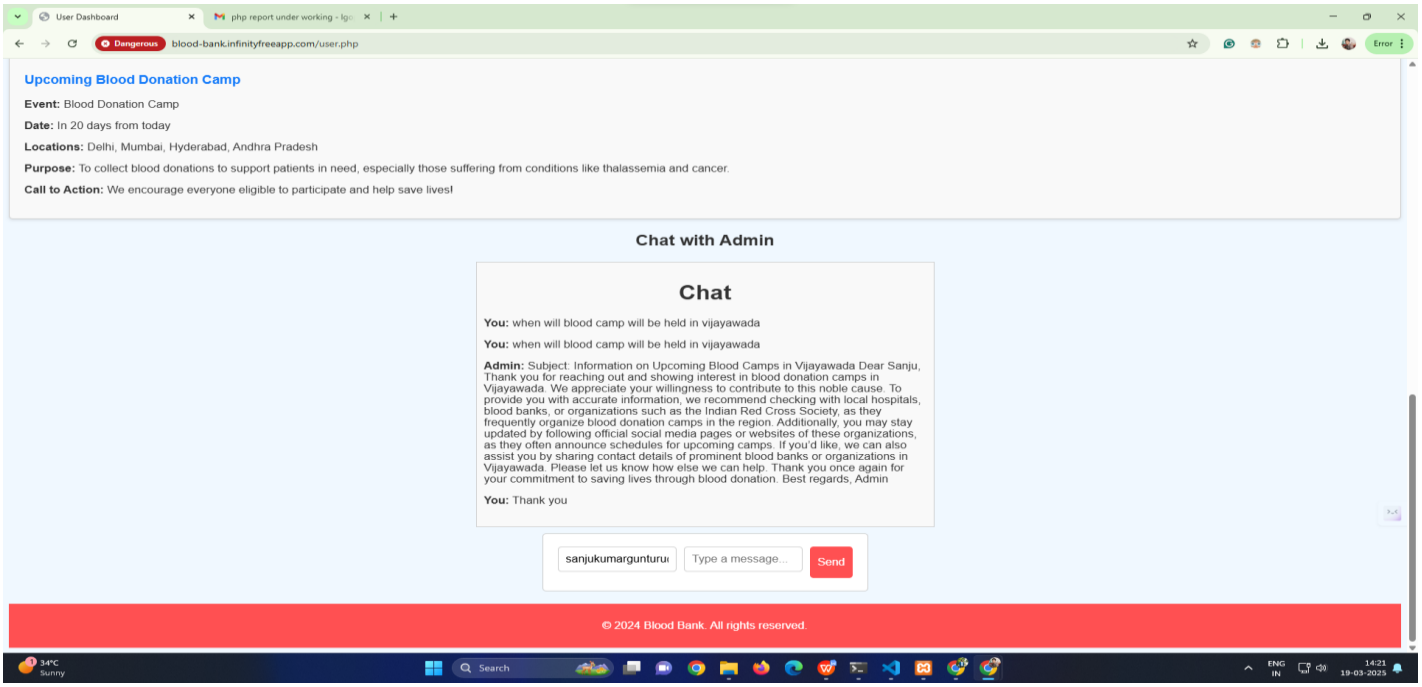
Once a user successfully logs into the BloodBridge platform, they are redirected to their **dashboard**, which provides personalized information and functionalities based on their role (donor, recipient, or admin).



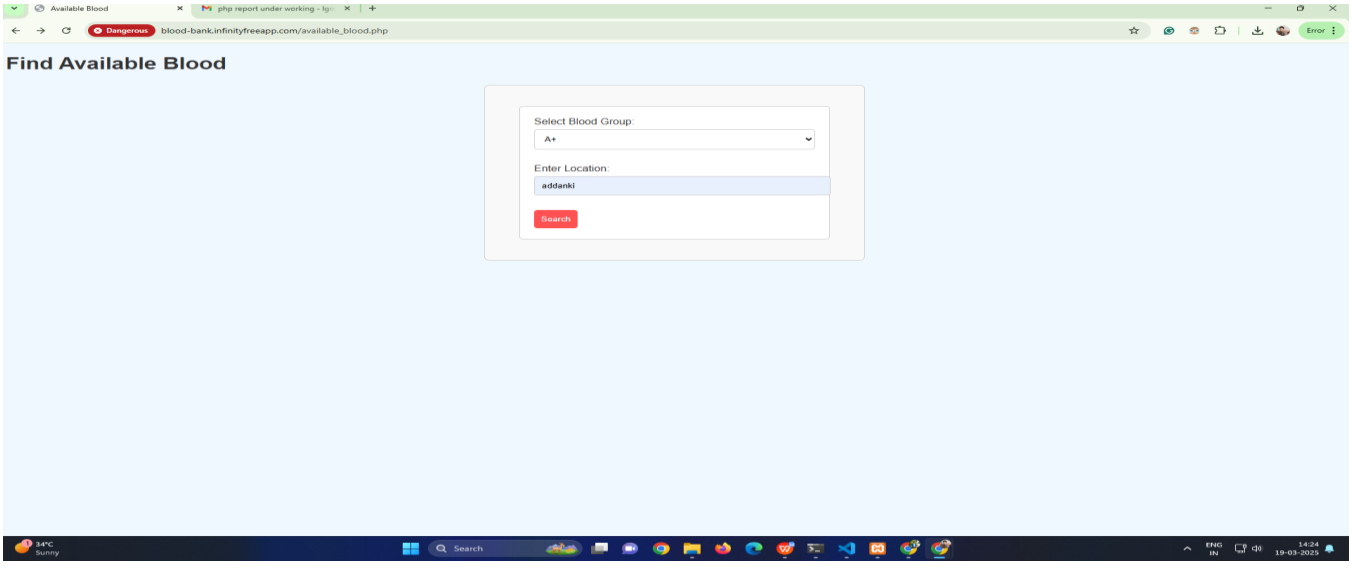
Key Features of the Dashboard

- **User Profile**: Displays the user's name, blood group, location, and contact details.
- **Donation History**: Lists previous blood donations with dates and locations.
- **Request Management**: Allows users to request blood or respond to donation requests.
- **Available Donors**: Displays a list of donors matching the required blood group and location.
- **Check Blood Availability**: Users can check the availability of specific blood groups in different locations and nearby hospitals.

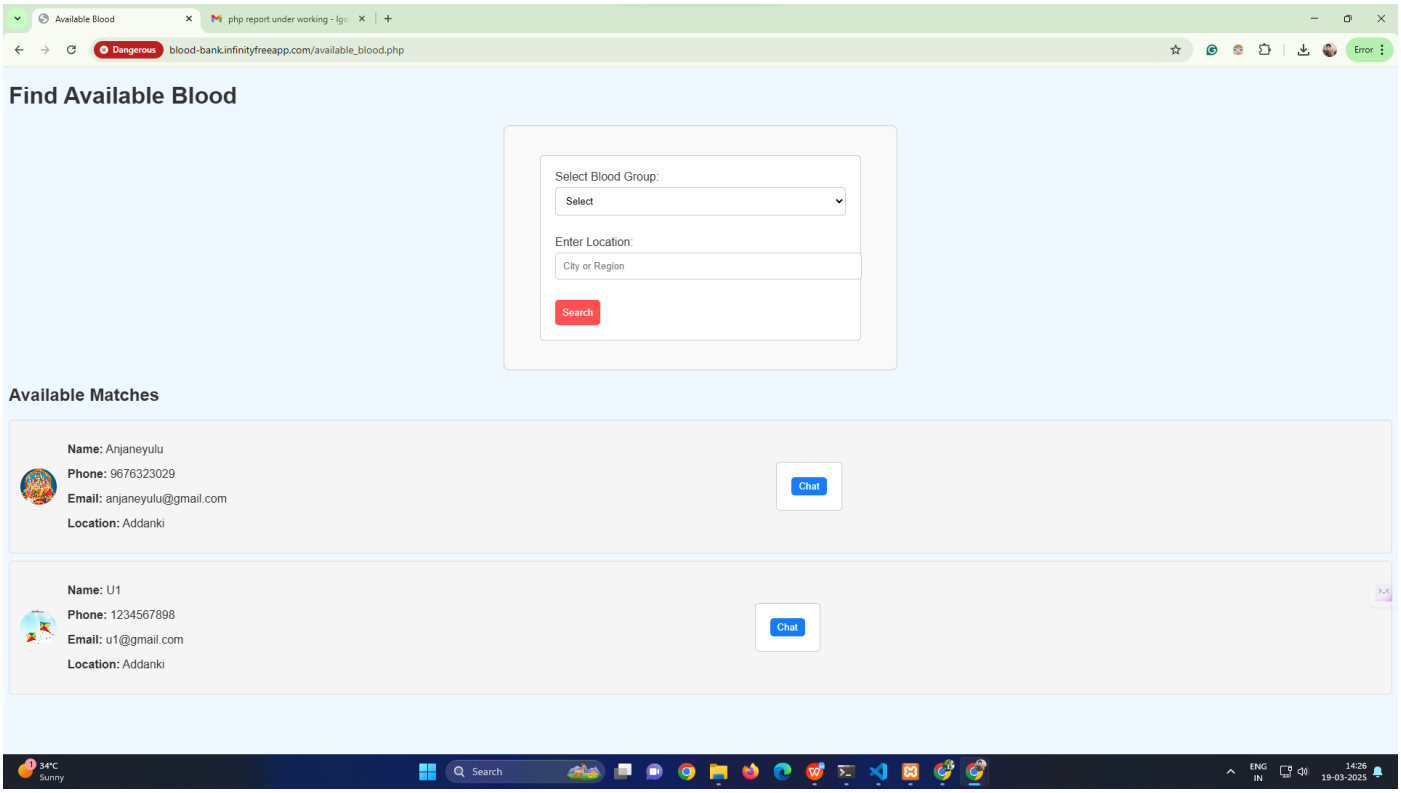
- **Chat with Admin**: A built-in chat feature allows users to communicate with the admin for assistance, queries, or urgent requests.
- **Notifications & Alerts**: Notifies users about upcoming donation camps, urgent blood requests, and account updates.
- **Edit Profile & Settings**: Users can update personal details, change passwords, and manage account preferences.
- **Logout Option**: Ensures secure session management by allowing users to log out after use.



This dashboard ensures a seamless experience by providing users with relevant information, direct communication with the admin, and real-time blood availability checks. Let me know if you need any modifications.



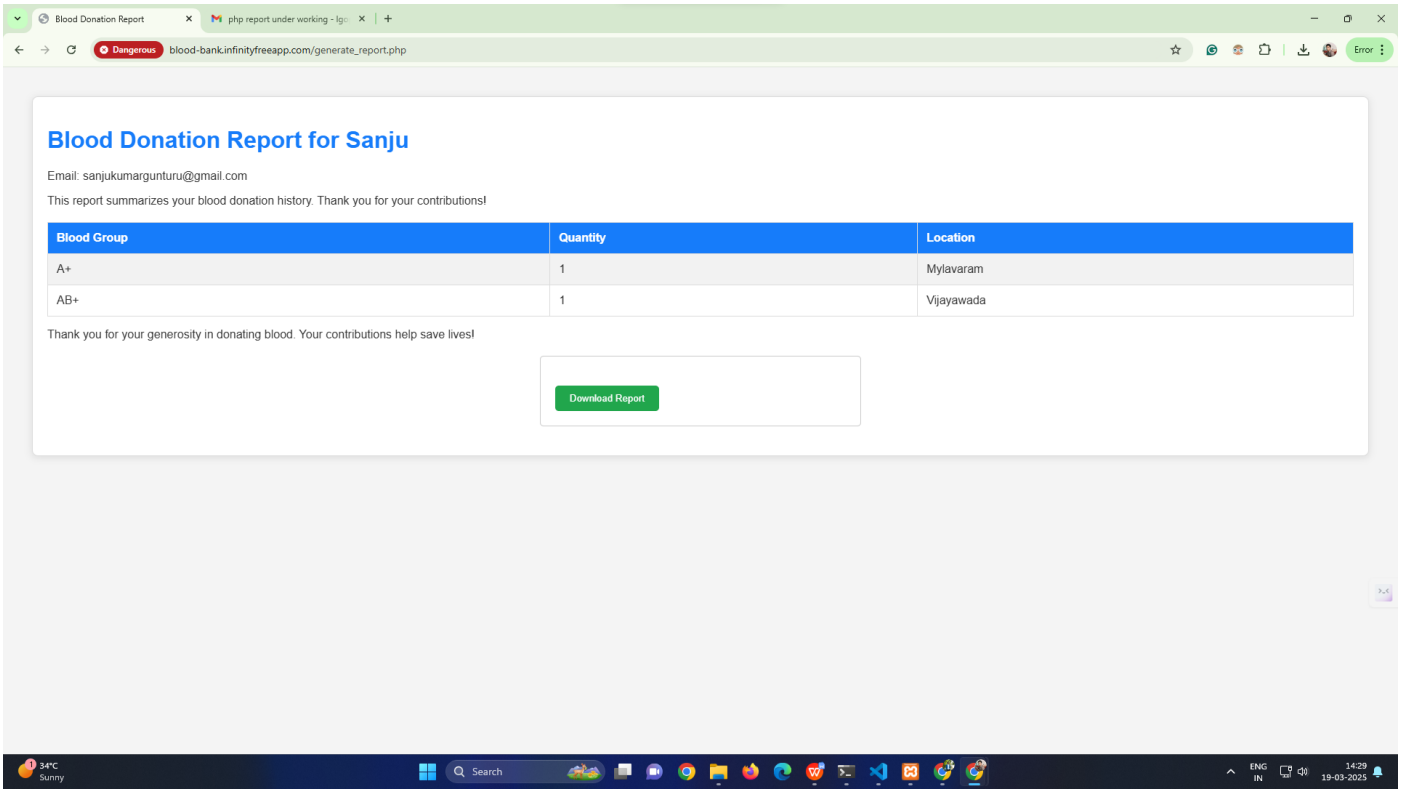
When a user searches for available blood on the BloodBridge platform, they can filter the results based on **blood group** and **location** to find suitable donors or blood banks nearby. The platform then retrieves relevant matches and displays the details of available donors.



Search Process and Features

- **Filter by Blood Group**: Users can select a specific blood group (e.g., A+, O-, B-) to refine the search results.
- **Filter by Location**: Users can enter their city or region to find donors or blood banks nearby.
- **Real-Time Availability**: The system fetches available blood units or registered donors from the database.
- **Donor Details Displayed**: Below each search result, the following details are shown:
    - **Username** of the donor
    - **Phone Number** for direct contact
    - **Email id** of donor
    - **Location** of donor
- **Request Blood Option**: Users can send a request to the donor or blood bank for immediate assistance.

This feature ensures that users can quickly find blood donors based on specific requirements, making the process efficient and accessible. Let me know if you need any modifications.



The **Download Report** feature in BloodBridge allows users to generate and download reports related to blood donation activities, donor details, and requests. This functionality helps users, hospitals, and administrators maintain records for reference and analysis.

Key Features of the Download Report Functionality

- **User-Specific Reports**: Users can download their **donation history**, including dates, locations, and blood group details.
- **Donor Availability Report**: Generates a report of available donors based on **blood group and location** filters.
- **Blood Request Report**: Displays details of **requested and fulfilled blood donations**, including donor and recipient information.
- **Admin Reports**: Admins can generate reports for **total donations, pending requests, and overall donor statistics**.
- **Export Options**: Reports can be downloaded in **PDF, Excel, or CSV formats** for easy sharing and offline access.
- **Automated Report Generation**: The system compiles data in real time to ensure up-to-date information before downloading.

This feature provides users with an efficient way to **track, manage, and analyze blood donation records** for better decision-making. Let me know if you need any modifications.

Blood Donation Report

Dear Sanju,

Thank you for your generous blood donations. Your contributions play a vital role in saving lives and ensuring a steady blood supply for those in need.

User Details:

Username: Sanju

Email: sanjukumargunturu@gmail.com

Blood Group	Quantity	Location
A+	1	Mylavaram
AB+	1	Vijayawada

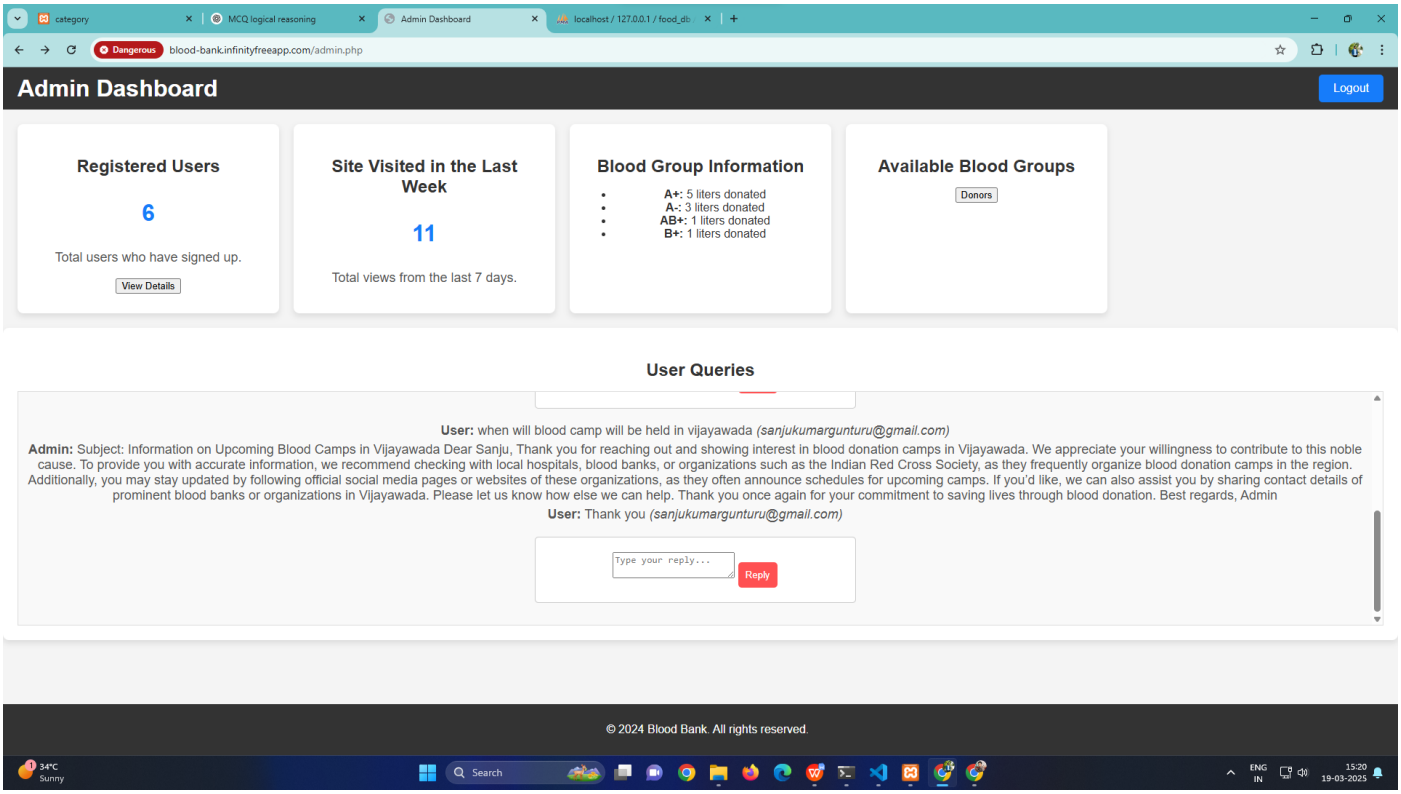
"The gift of blood is the gift of life. There is no substitute for human blood."

Your donations have a lasting impact. We encourage you to continue donating and inspiring others to join this noble cause. Together, we can build a healthier and stronger community.

Keep donating, keep saving lives!

The **User Page** in BloodBridge provides a seamless and efficient experience for donors and recipients, ensuring easy access to essential blood donation services. With features like **profile management, blood search with filters, donation history, chat with admin, and report downloads**, the platform enhances user engagement and simplifies the blood donation process. The ability to **check blood availability, contact donors, and request blood in emergencies** makes BloodBridge a reliable and user-friendly system. By integrating these functionalities, the platform ensures a smooth and secure experience, encouraging more users to participate in life-saving blood donation efforts.

Admin

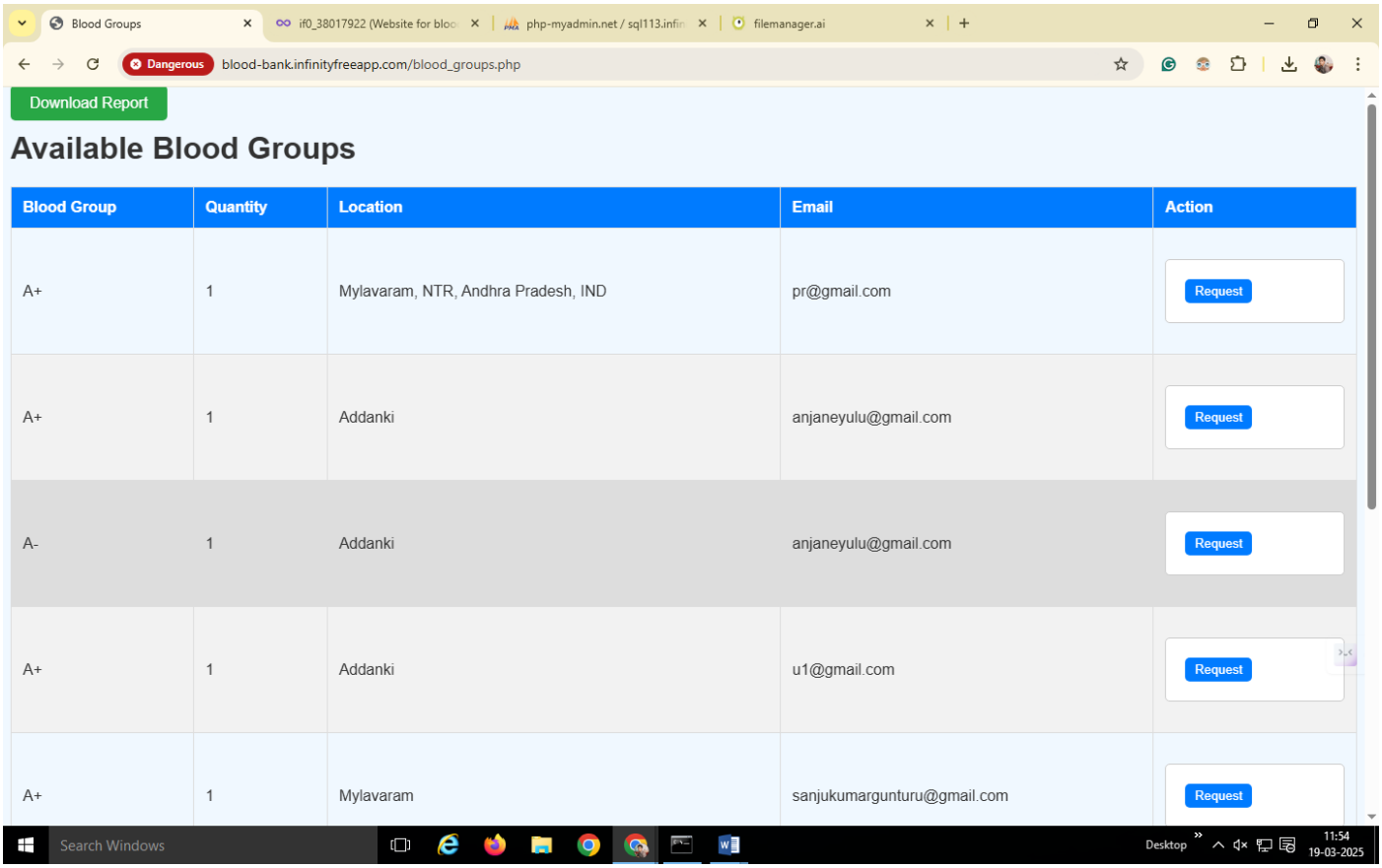


The **Admin Dashboard** in BloodBridge provides an overview of user activities, blood donation statistics, and user queries. It enables the admin to monitor and manage the platform efficiently.

Key Features of the Admin Dashboard

- **Registered Users**: Displays the total number of users who have signed up, with an option to view detailed user information.
- **Site Visits in the Last Week**: Shows the total number of views from the last seven days, helping the admin track platform engagement.
- **Blood Group Information**: Provides data on the amount of blood donated for different blood groups, such as A+, A-, B+, and AB+.
- **Available Blood Groups**: Contains a section to view available blood groups, ensuring the admin can manage inventory effectively.
- **User Queries**: Displays messages sent by users and admin responses, allowing direct communication between users and the admin.
- **Logout** : Enables the admin to securely log out of the dashboard after monitoring and managing the platform.

The admin panel plays a crucial role in managing users, responding to queries, and tracking blood donation trends, ensuring smooth platform operations.



The **Available Blood Groups** section in the BloodBridge **Admin Panel** allows administrators to monitor and manage blood availability efficiently. It provides a structured overview of the available blood units, donor details, and locations.

Key Features

- **Blood Group**: Displays different blood groups such as A+, A-, B+, etc.
- **Quantity**: Shows the number of available blood units for each blood group.
- **Location**: Indicates where the blood is available, helping users find nearby donors.
- **Email**: Lists the donor's or hospital's email for direct communication.
- **Action (Request Button)**: Allows users or hospitals to request specific blood groups as per their requirement.
- **Download Report**: The admin can download a report of all available blood groups and donor details for better record-keeping.

This section ensures efficient blood inventory management, allowing quick responses to requests and maintaining a steady blood supply for those in need.

Mrs.B. Usha Rani
Course Instructor

Dr.D.Veeraiah
Head of the Department

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details:

Course Name:	Information Retrieval Systems
Course Code:	20CS21
Branch/Sem/Section:	CSE /VI /A
Academic Year:	2024-25
Faculty Name:	P. Veera Swamy
Topic Selected:	Information Extraction Techniques
Date of Activity:	09-01-2025

1.Selection of activity:

During the **Information Retrieval Systems** course, I planned to conduct a one activity-based learning task with students that is **"Case Studies and Real-World Scenarios".** This activity helps the students to examine how information retrieval systems operate in different contexts, such as:

- Analysing search engines like Google or Bing to understand how they rank results and personalize content.
- Examining the use of information retrieval in specific domains, like e-commerce or healthcare, to see how different retrieval techniques are used to meet business needs.

2.List of outcomes associated with this activity:

Case studies and real-world scenarios in Information Retrieval Systems (IRS) provide practical insights into how these systems function in real environments and help learners and practitioners understand their impact and limitations. Outcomes from these case studies and scenarios can be invaluable in guiding best practices, system design, and user experience improvements.

Here's a list of typical outcomes from case studies and real-world scenarios in IRS:

1. Improved Understanding of User Behavior

Case studies can shed light on how users interact with information retrieval systems, providing insights into:

- Common user queries and patterns.
- User expectations and preferences.

- Behavior influenced by personalized search or recommender systems.

2. Identification of System Limitations and Challenges

Real-world scenarios often reveal areas where information retrieval systems may struggle, including:

- Inability to handle complex queries or unusual terms.
- Problems with scalability and performance under heavy loads.
- Bias in search results or recommendations due to skewed data or algorithms.

3. Development of Best Practices

Case studies help develop best practices for designing and maintaining information retrieval systems, including:

- Effective indexing and query processing techniques.
- Strategies for optimizing system performance and scalability.
- Approaches to ensure data privacy and security.

4. Enhanced Retrieval Models and Techniques

Outcomes from real-world scenarios can lead to improved retrieval models and techniques, such as:

- Refinements to existing models like TF-IDF, BM25, or neural-based models.
- New methods for integrating contextual and semantic information into search results.
- Enhanced learning-to-rank approaches for better document ordering.

5. Improved System Usability and User Experience

Case studies focused on user interaction can lead to outcomes that improve system usability, including:

- Designing intuitive user interfaces for search and retrieval.
- Incorporating user feedback to refine search results and recommendations.
- Addressing accessibility concerns to ensure all users can interact with the system effectively.

6. Implementation of Real-World Solutions

Case studies provide concrete examples of how IRS is implemented in various industries, leading to outcomes such as:

- Successful use cases in e-commerce, healthcare, legal research, and other domains.
- Solutions that demonstrate the effectiveness of certain retrieval techniques in specific contexts.
- Examples of how IRS can be integrated into larger systems or workflows.

7. Identification of Ethical Considerations and Bias

Real-world scenarios highlight ethical issues and potential biases in IRS, leading to outcomes like:

- Understanding the impact of biased data on search results and recommendations.

- Identifying ethical concerns related to user privacy, data security, and content moderation.
- Developing guidelines to ensure fairness and transparency in information retrieval systems.

8. New Opportunities for Innovation

Case studies can uncover areas for innovation and further research, such as:

- Emerging technologies that could enhance information retrieval, like AI and machine learning.
- New applications for IRS in diverse fields, from education to entertainment.
- Opportunities to create hybrid models that combine multiple retrieval techniques.

3.Objectives of Activity:

The objectives of using case studies and real-world scenarios in the context of Information Retrieval Systems (IRS) are varied, focusing on enhancing practical understanding, promoting problem-solving skills, and fostering innovation. Here is a comprehensive list of objectives:

1. Practical Application of Theoretical Concepts

Case studies and real-world scenarios enable learners and practitioners to apply theoretical concepts from information retrieval in practical situations.

2. Deepening Understanding of User Behavior

By examining real-world scenarios, the objective is to understand user behaviour in interaction with information retrieval systems.

3. Identifying and Addressing System Limitations

An objective of case studies is to uncover limitations or challenges within IRS, such as scalability issues, biases, or performance bottlenecks.

4. Promoting Critical Thinking and Problem-Solving

Case studies often present complex problems that require innovative solutions.

5. Fostering Collaboration and Teamwork

Case studies and real-world scenarios are often best tackled in groups, promoting collaboration and teamwork.

6. Enhancing System Design and Usability

The goal is to use insights from case studies to improve system design, ensuring that IRS is user-friendly and meets user needs.

7. Encouraging Ethical Awareness

Real-world scenarios can highlight ethical considerations in IRS, such as user privacy, data security, or content bias.

8. Stimulating Innovation and Creativity

This objective aims to encourage participants to think creatively and explore new ideas that could lead to advancements in IRS technology and applications.

9. Providing Real-World Context for Learning

An important objective of using case studies is to provide a real-world context for learning.

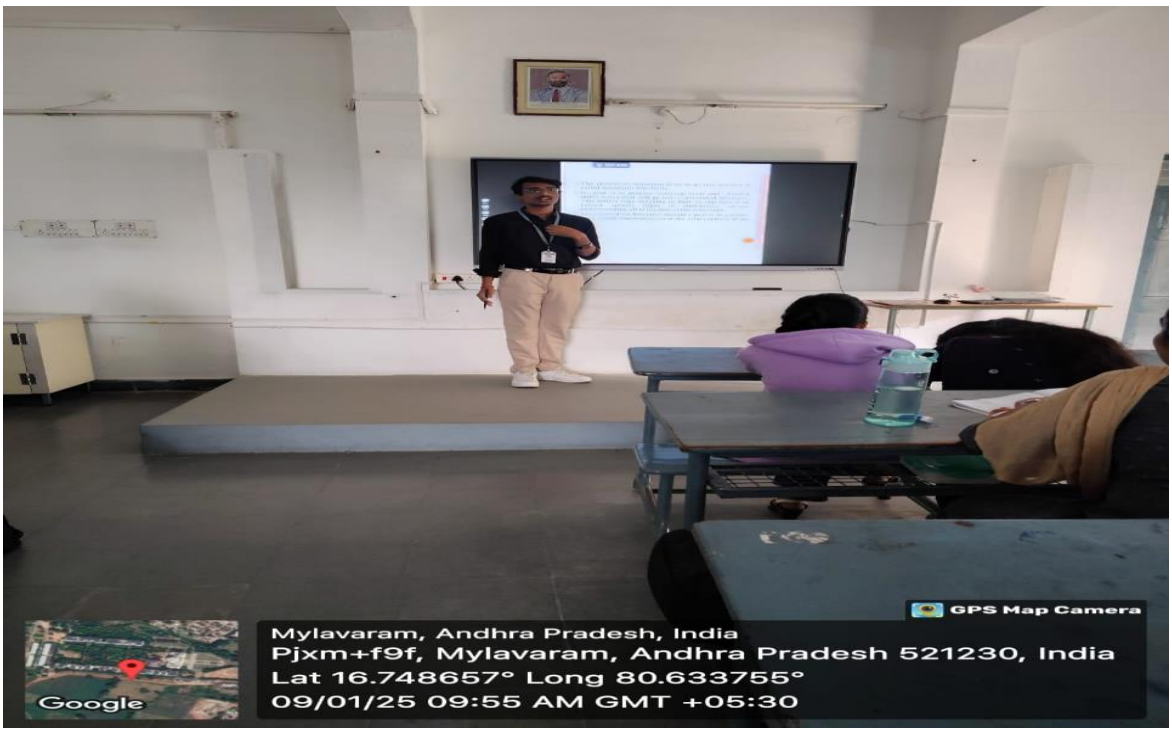
10. Demonstrating the Impact of Information Retrieval Systems

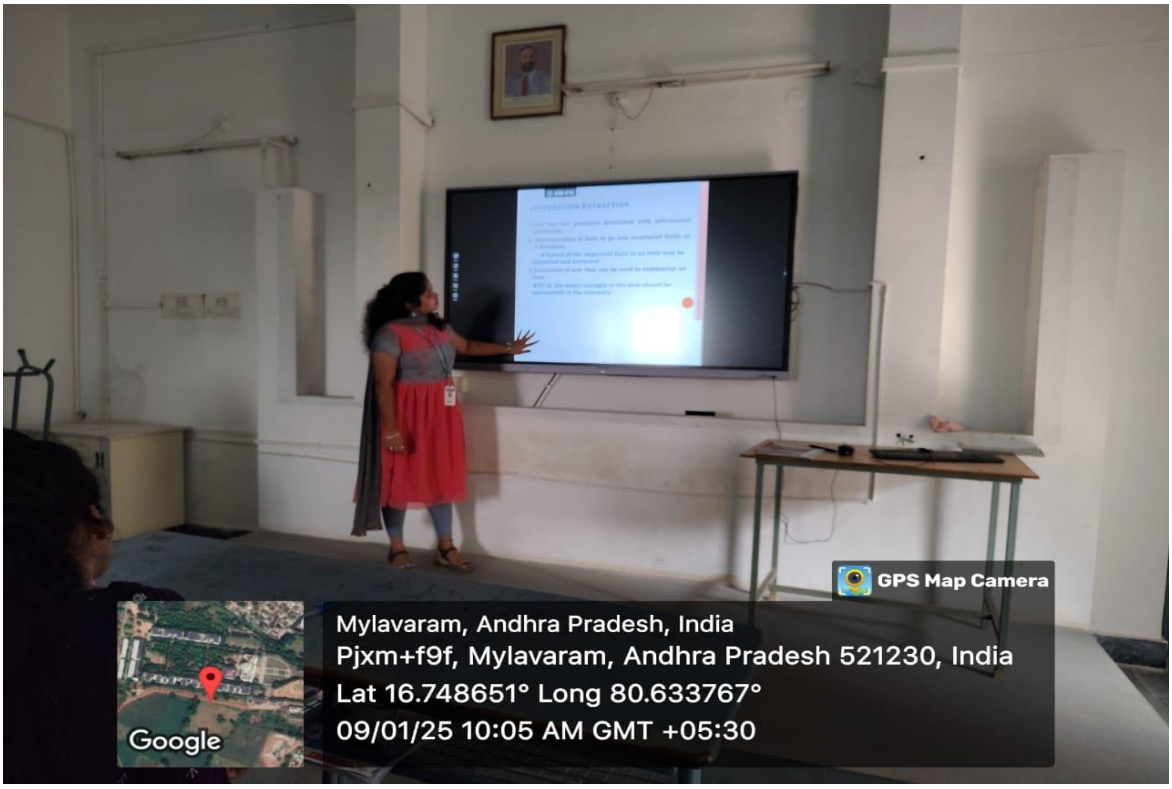
Through case studies and real-world scenarios, participants can see the broader impact of IRS on various industries and aspects of society.

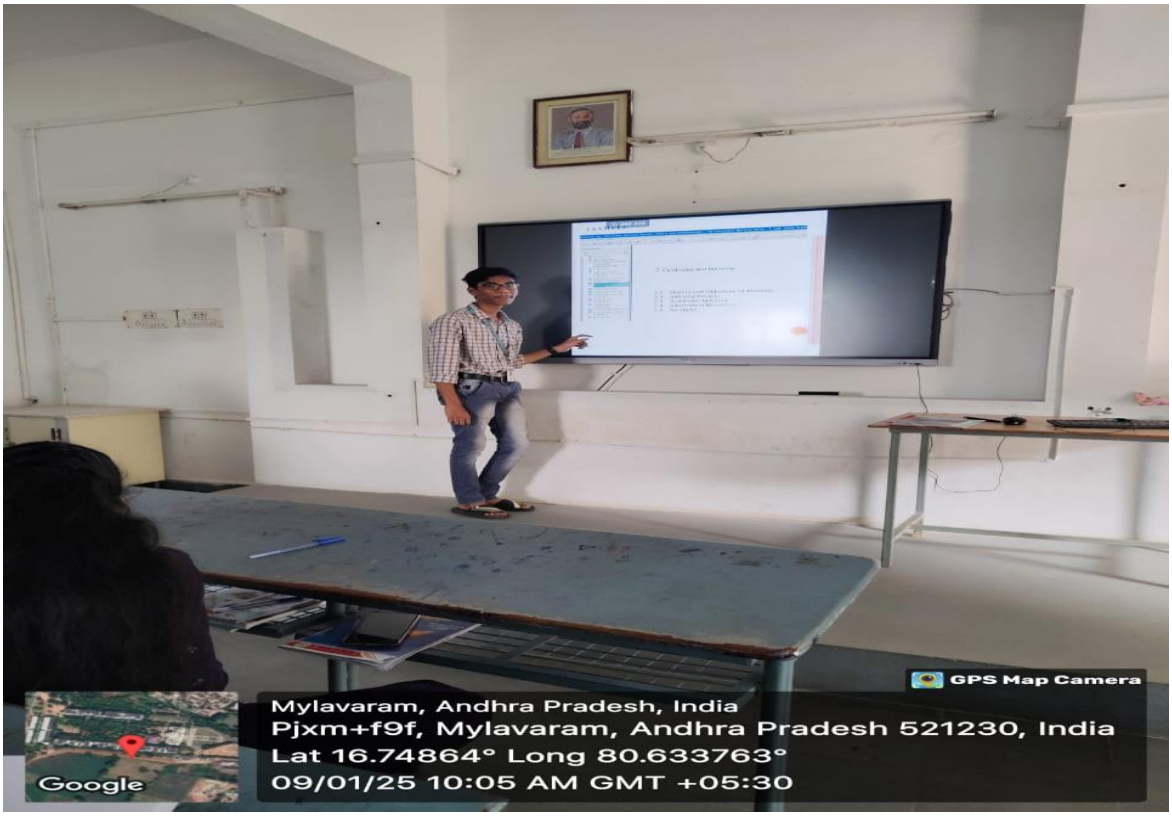
4.Details of participants in Case Studies and Real-World Scenarios

S.no	Roll number	Name	Topic
1	22761A0517	Gogineni Pavanesh	He was practically showing how to Information Extracting
2	22761A0510	Chellu Kranthi Sree	She was practically showing how to Information Extracting
3	22761A0511	Chintada Yaswanth	He was explaining the Information Extracting techniques
4	22761A0540	Narahari Bala Saraswathi	She was explaining the Information Extracting techniques

1. **Activity Photos:**




GPS Map Camera
Mylavaram, Andhra Pradesh, India
Pjxm+f9f, Mylavaram, Andhra Pradesh 521230, India
Lat 16.748651° Long 80.633767°
09/01/25 10:05 AM GMT +05:30
Google


GPS Map Camera
Mylavaram, Andhra Pradesh, India
Pjxm+f9f, Mylavaram, Andhra Pradesh 521230, India
Lat 16.74864° Long 80.633763°
09/01/25 10:05 AM GMT +05:30
Google

Course Instructor **Head of the Department**

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details:

Course Name:	OPERATING SYSTEMS
Course Code:	23CS06
Branch/Sem/Section:	CSE /IV//B
Academic Year:	2024-25
Faculty Name:	Dr CH V NARAYANA
Topic Selected:	ROLE-PLAY
Date of Activity:	1/4/2025

1. **Selection of activity:** To encourage II-year students I conducted the **ROLE-PLAY Physical Activity.** It improves the Cognitive behavior of the students and the teamwork.

2. **List of outcomes associated with activity:**
   In my course the following outcomes are associated with the selected activity.
   - Teamwork building.
   - Improve Interpretation skills, stage management.
3. **Objectives of activity:**
   The main objectives of this activity are listed as follows. A learner able to:
   - Develop interpersonal communication.
   - Develop stage management.
   - Improves the Cognizance.
4. **Details of participants in Seminar / Role-Play**

S.no	Roll number	Name	Topic
1	23761A0567	A SANDEEP	ROLE-PLAY
2	23761A0595	SUMASRI	ROLE-PLAY
3	23761A0599	K SUBBA RAO	ROLE-PLAY
4	23761A05A0	K HARSHITA	ROLE-PLAY
5	23761A05B0	P V KUMAR	ROLE-PLAY
6	23761A05B7	B. P LATHA	ROLE-PLAY

5. **Activity Photos:**

Dr CH V NARAYANA

Course Instructor

Dr. D. Veeraiah

Head of the Department

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(An Autonomous Institution since 2010)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018, 14001:2015, 50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Activity Based Learning

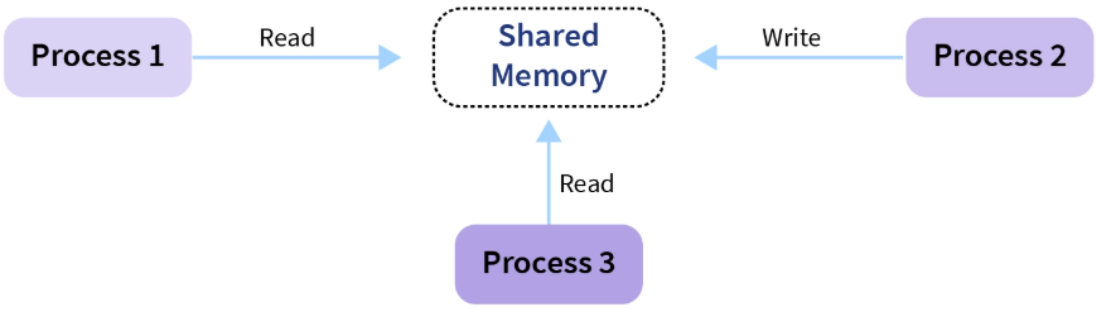
Name of Course Instructor: Dr. G V Suresh		**Reg**:23
Course Name & Code	**:** OS – 23CS55	**Cycle1**: Unit I, II
L-T-P Structure	**:** 3-0-0	**Credits:** 3
Program/Sem/Sec	**:** B. Tech/IV/ C	**A.Y.:** 2024-25

Date: 01-02-2025

Seminar

Processes Synchronization or Synchronization is the way by which processes that share the same memory space are managed in an operating system. It helps maintain the consistency of data by using variables or hardware so that only one process can make changes to the shared memory at a time. There are various solutions for the same such as semaphores, mutex locks, synchronization hardware, etc.

- How do Process Synchronization in OS Works?
  Let us take a look at why exactly we need Process Synchronization. For example, If a process1 is trying to read the data present in a memory location while another process 2 is trying to change the data present at the same location, there is a high chance that the data read by the process1 will be incorrect.



- **Entry Section:** The entry Section decides the entry of a process.
- **Critical Section:** The Critical section allows and makes sure that only one process is modifying the shared data.
- **Exit Section:** The entry of other processes in the shared data after the execution of one process is handled by the Exit section.
- **Remainder Section:** The remaining part of the code which is not categorized as above is contained in the Remainder section.

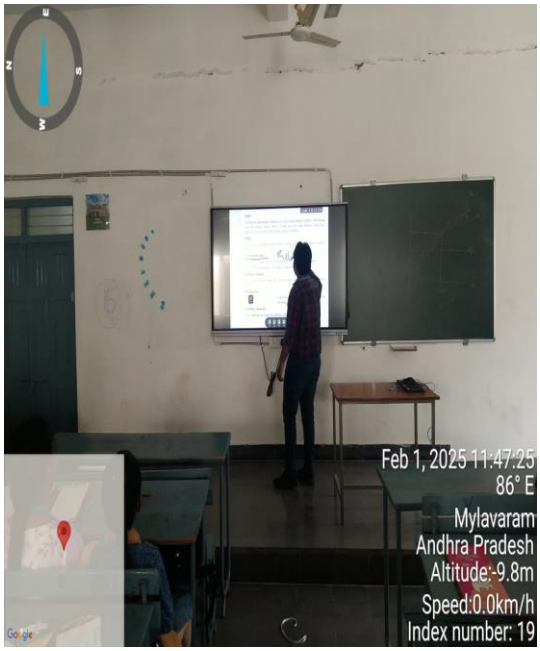
Requirements of Synchronization

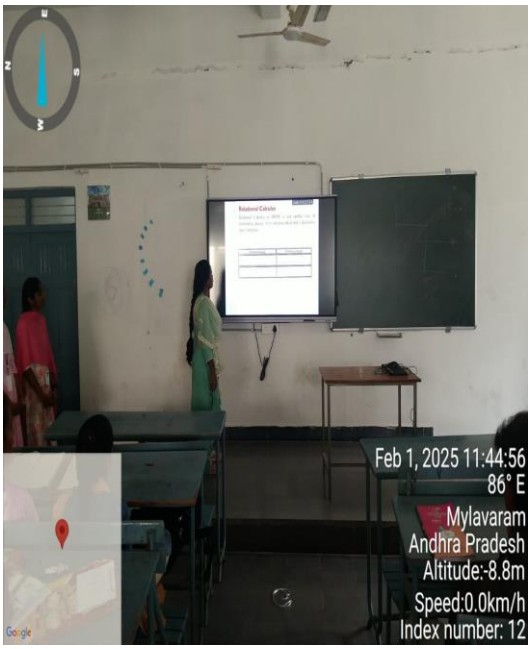
Mutual exclusion: If a process is running in the critical section, no other process should be allowed to run in that section at that time.

Progress: If no process is still in the critical section and other processes are waiting outside the critical section to execute, then any one of the threads must be permitted to enter the critical section. The decision of which process will enter the critical section will be taken by only those processes that are not executing in the remaining section.

No starvation: Starvation means a process that keeps waiting forever to access the critical section but never gets a chance. No starvation is also known as Bounded Waiting.

- A process should not wait forever to enter inside the critical section.
- When a process submits a request to access its critical section, there should be a limit or bound, which is the number of other processes that are allowed to access the critical section before it.
- After this bond is reached, this process should be allowed to access the critical section.





Title	Course Instructor	Course Coordinator	Module Coordinator	Head of the Department
Name of the Faculty	G.V.Suresh	Dr. Dr. D. Venkata Subbaiah	Dr. Dr. D. Venkata Subbaiah	Dr. D. Veeraiah
Signature				

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details:

Course Name:	Database Management Systems
Course Code:	23CS03
Branch/Sem/Section:	CSE /IV /A
Academic Year:	2024-25
Faculty Name:	G.V.Rajya Lakshmi
Topic Selected:	DBMS constraints, SQL, E-R model
Date of Activity:	30-01-2025

1. **Selection of activity:**

   In my course, to conduct an active learning work, I plan to conduct **"On-Board Quiz".** This helps students achieve objectives by improving conceptual clarity and analysis skills on the above concepts.

2. **List of outcomes associated with activity:**

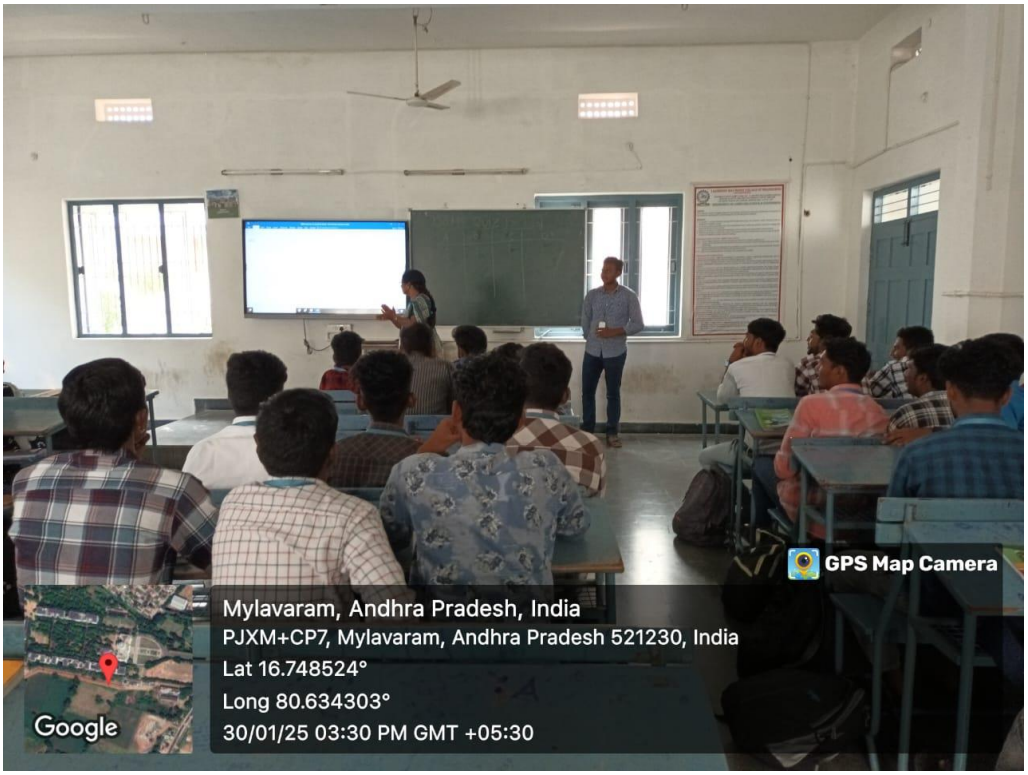
   In my course the following outcomes are associated with the selected activity.
   - Able to think and analyse on DBMS Constraints, SQL rules, ER-Model on various case studies.
   - Improve individual / team work skills in SQL query writing

3. **Objectives of activity:**

   The main objectives of this activity are listed as follows. A learner able to:
   - Interact in activities and stimulate interest and motivate learners contributing to a more enjoyable and effective learning experience.
   - Work and present towards a common goal.
   - Achieve specific knowledge on the topics.

4. **Details of participants - All students in Class room are formed in four groups such as A,B,C,D.**

5. Activity Photos:



G.V.Rajya Lakshmi
Course Instructor

Dr.D.Veeraiah
Head of the Department

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details:

Course Name:	Database Management Systems
Course Code:	23CS03
Branch/Sem/Section:	CSE /IV /A
Academic Year:	2024-25
Faculty Name:	G.V.Rajya Lakshmi
Topic Selected:	Contructing Entity-Relationship Diagrams
Date of Activity:	08-01-2025

1. **Selection of activity:**

In my course, to conduct an active learning work, I plan to conduct **"Group Collaborative thinking".** This helps learners develop interpersonal skills and learn to work effectively as a team.

2. **List of outcomes associated with activity:**

In my course the following outcomes are associated with the selected activity.

- Able to think and draw Entity – Relationship diagrams on various case studies.
- Improve individual / team work skills, communication & report writing skills with ethical values.

3. **Objectives of activity:**

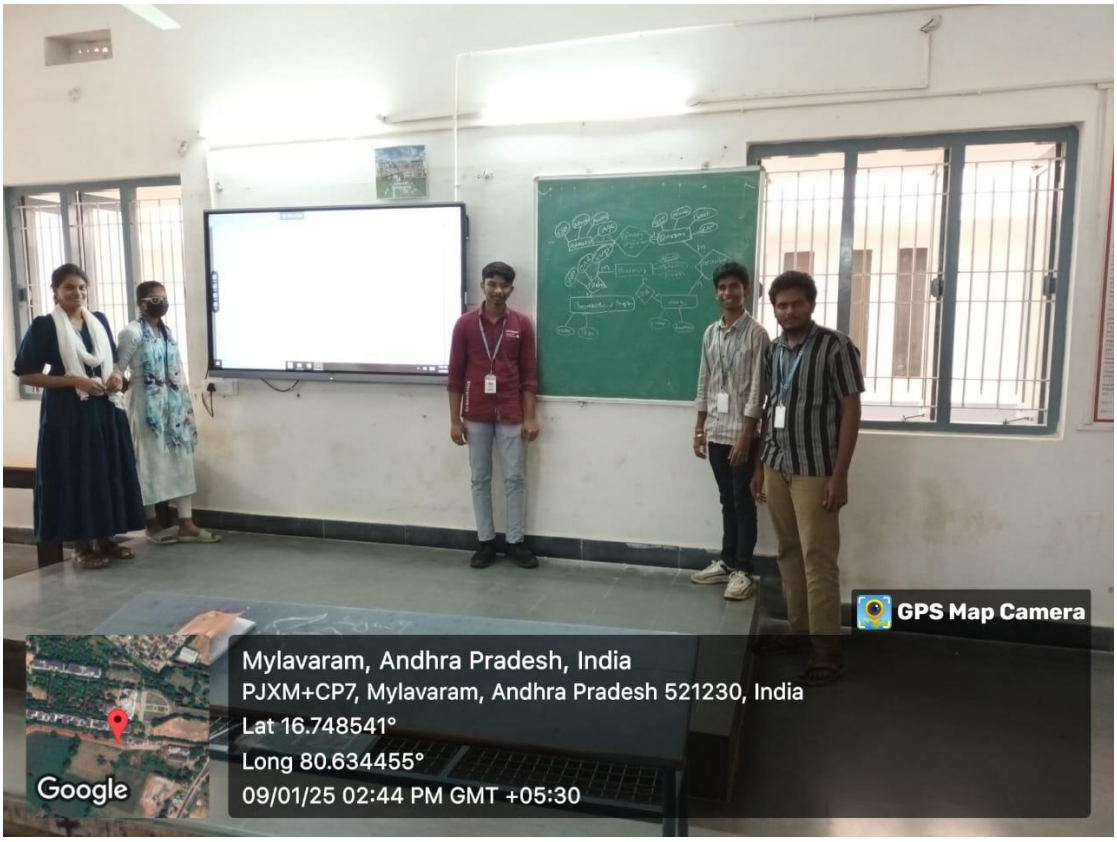
The main objectives of this activity are listed as follows. A learner able to:

- Interact in activities and stimulate interest and motivate learners contributing to a more enjoyable and effective learning experience.
- Work and present towards a common goal.
- Achieve specific knowledge on the topics.

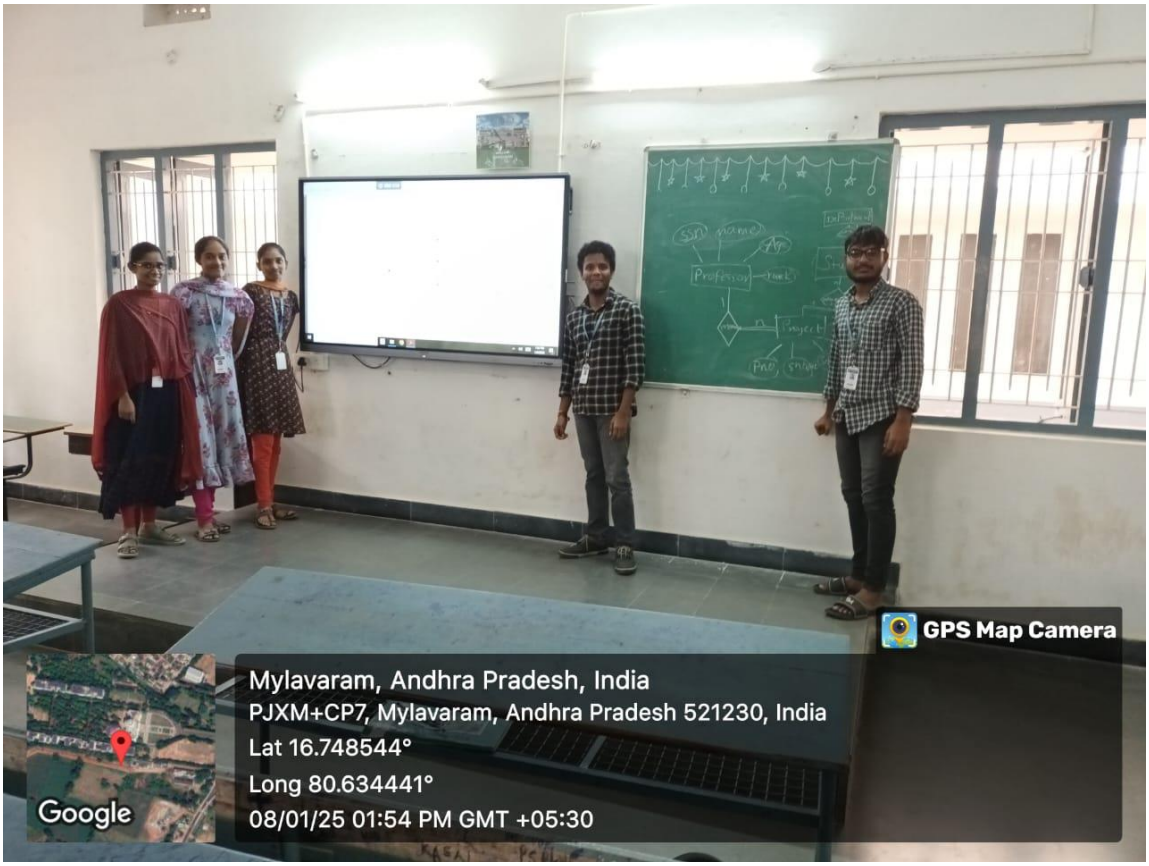
4. Details of participants in Group Collaborative thinking

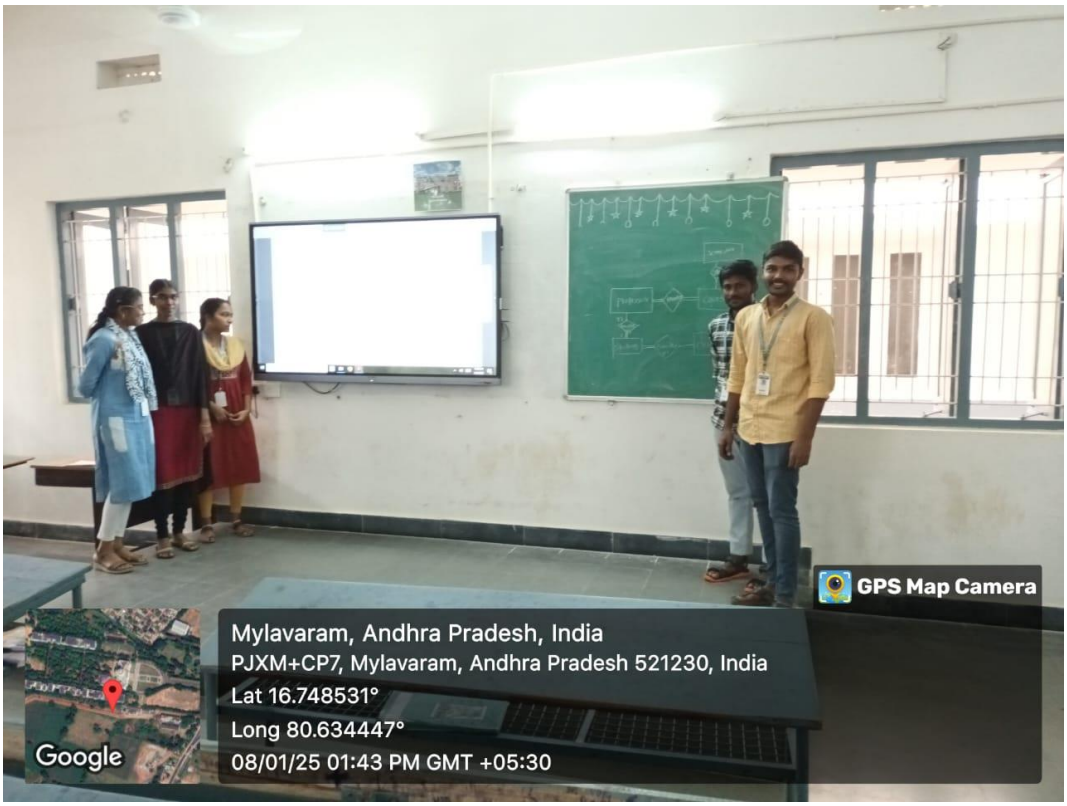
Team No	Roll numbers	Case scenario for ER - Diagram
1	23761A0546, 514, 537, 542, 513	University Database
2	23761A0518, 547, 550, 548, 521	Company Employees database
3	23761A0559, 558, 520, 512, LE-2	Music Album company database
4	23761A0515, 505, 531, 551, 566	Airport organization database
5	23761A0519, 524, 530, 510, 554	Hospital-Pharmaceutical database

5. Activity Photos:




GPS Map Camera
Mylavaram, Andhra Pradesh, India
PJXM+CP7, Mylavaram, Andhra Pradesh 521230, India
Lat 16.748547°
Long 80.634443°
09/01/25 03:02 PM GMT +05:30
Google


GPS Map Camera
Mylavaram, Andhra Pradesh, India
PJXM+CP7, Mylavaram, Andhra Pradesh 521230, India
Lat 16.748544°
Long 80.634441°
08/01/25 01:54 PM GMT +05:30
Google



G.V.Rajya Lakshmi
Course Instructor

Dr.D.Veeraiah
Head of the Department

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details:

Course Name:	Software Engineering
Course Code:	23IT02
Branch/Sem/Section:	CSE /IV /D
Academic Year:	2024-25
Faculty Name:	Dr. J. Nageswara Rao
Topic Selected:	Constructing UML diagrams like Class, Sequence, Use case, Component, deployment diagrams for the given case studies like Railway Reservation system, Online food ordering system, Online Shopping system etc..
Date of Activity:	14-02-2025

1. **Selection of activity:**

In my course, to conduct a collaborative work, I plan to conduct **"Student-Team-Achievement-Divisions (STAD)".** The advantage of using STAD is students work collectively in achieving objectives by safeguarding the norms of the group.

2. **List of outcomes associated with collaborative activity:**

In my course the following outcomes are associated with the selected collaborative activity (STAD).

- Constructing Sequence Diagram for Online food ordering system
- Improve individual / teamwork skills, communication & report writing skills with ethical values.

3. **Objectives of Collaborative activity:**

The main objectives of collaborative activity are listed as follows. A learner able to:

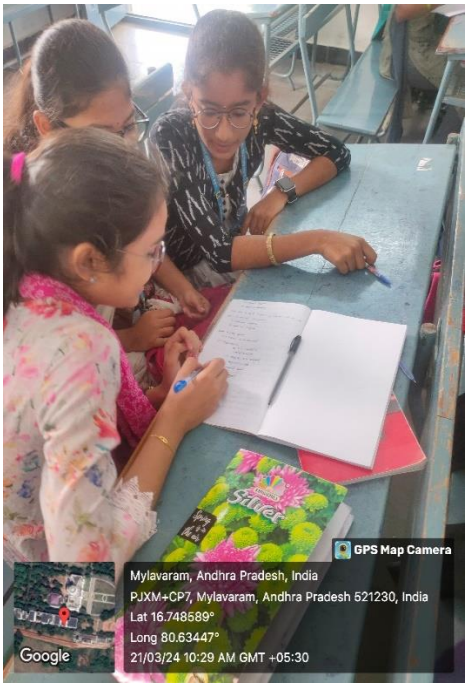
- Develop interpersonal communication.
- Develop and contribute towards a common goal.
- Acquire specific knowledge on the topic.

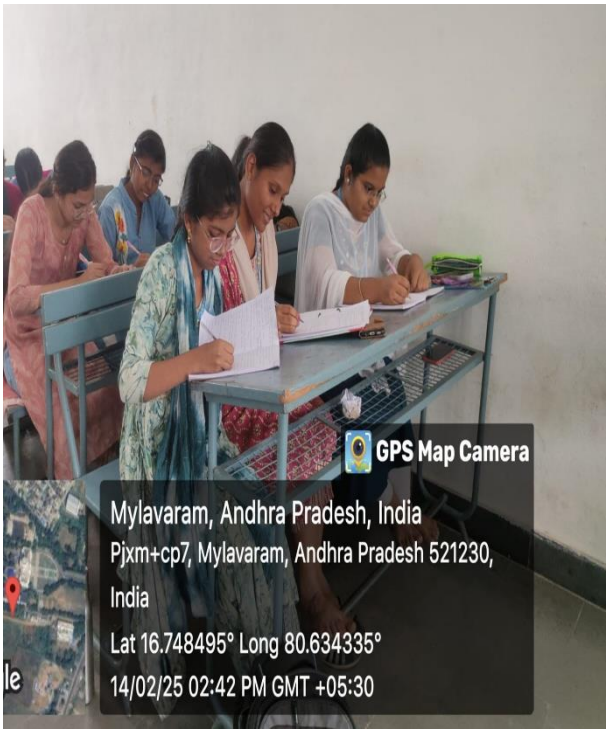
4. **procedure to conduct an activity:**

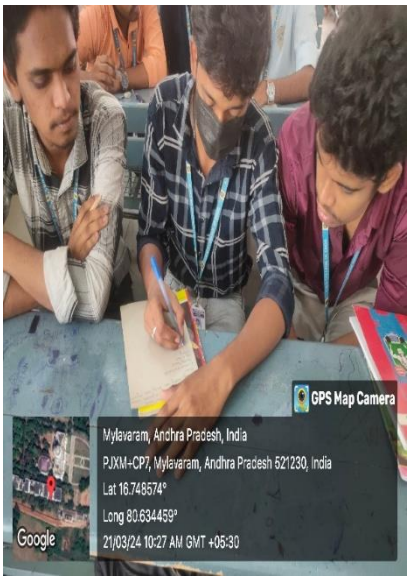
I used the following steps, to organize the Student-Team-Achievement-Divisions (STAD) activity in the class.

For each Student, We allotted one specific topic to Design uml diagrams (Class, Sequence, Use case, Component, deployment diagrams) for the given case studies like Railway Reservation system, Online food ordering system, Online Shopping system etc..

5. Activity Proofs:



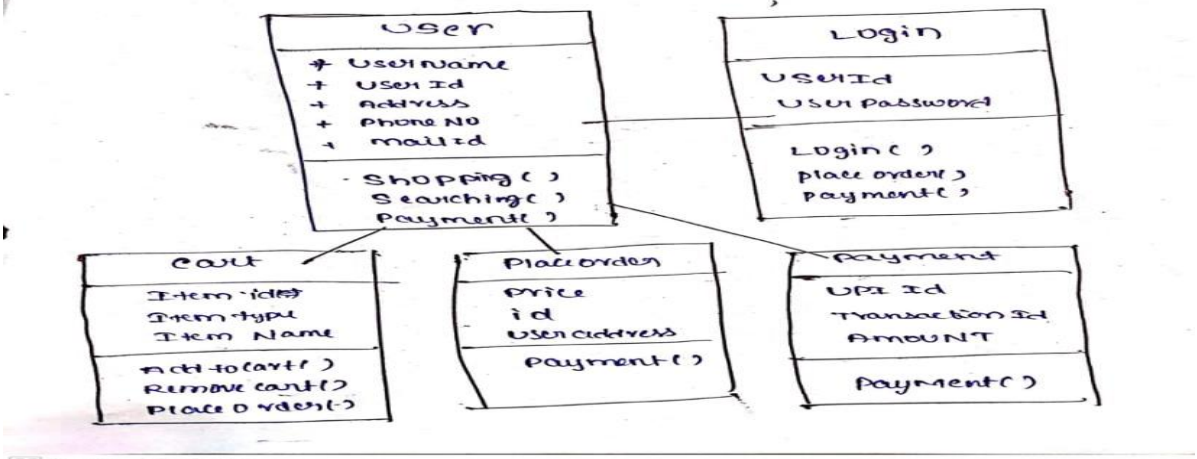


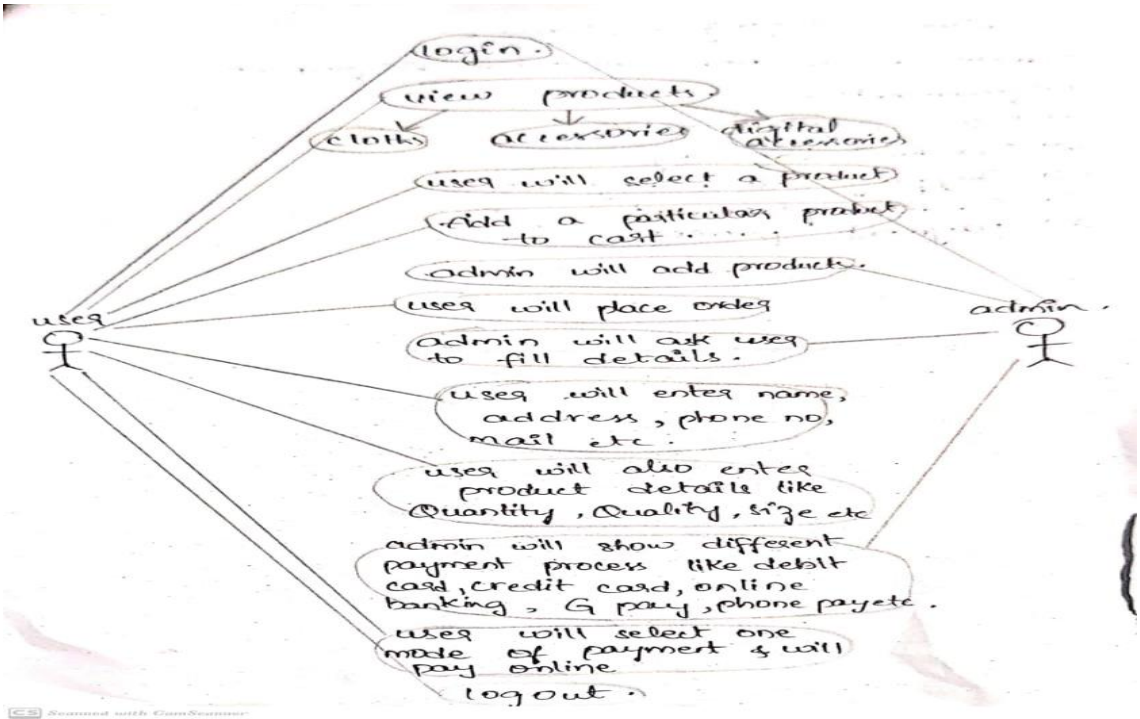


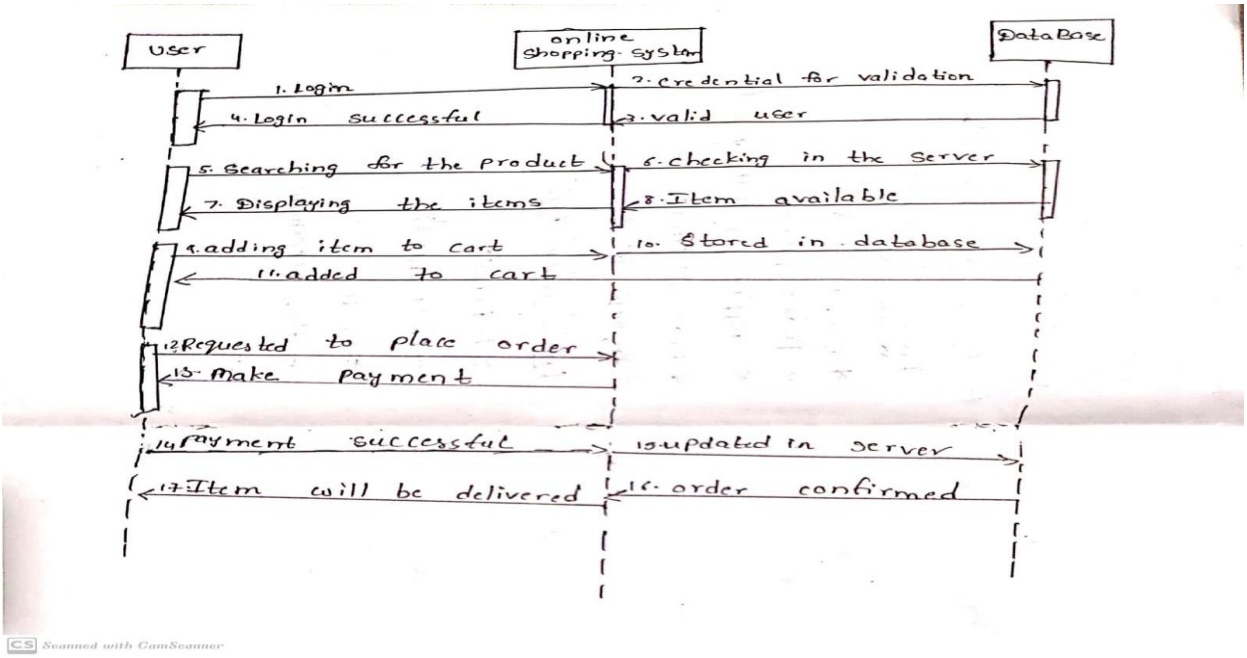
ROLL NO - 33, 24, 22.

Requirement gathering:-

① User Registration
② search process
③ shopping cart management
④ Place order
⑤ Payment process







Course Instructor **Head of the Department**

Dr. J. Nageswara Rao **Dr. D Veeraiah**

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details:

Course Name:	Software Engineering
Course Code:	23IT02
Branch/Sem/Section:	CSE /IV /D
Academic Year:	2024-25
Faculty Name:	Dr. J. Nageswara Rao
Topic Selected:	Presentation on Software Development Life cycle(SDLC), Characteristics of Software, Software Process models, Waterfall Model etc..,
Date of Activity:	23-01-2025

1. **Selection of activity:**

In my course, to conduct an active learning work, I plan to conduct **"Seminar and Roleplay".** This helps students in achieving objectives with improving individual presentation and analysis skills.

2. **List of outcomes associated with activity:**

In my course the following outcomes are associated with the selected activity.

- Student can Understand the concept of Software Development Life cycle(SDLC) and working process of SDLC.
- Improve individual / team work skills, communication & report writing skills with ethical values.

3. **Objectives of activity:**

The main objectives of this activity are listed as follows. A learner able to:

- Develop interpersonal communication.
- Develop and contribute towards a common goal.
- Acquire specific knowledge on the topic.

4. **procedure to conduct an activity:**

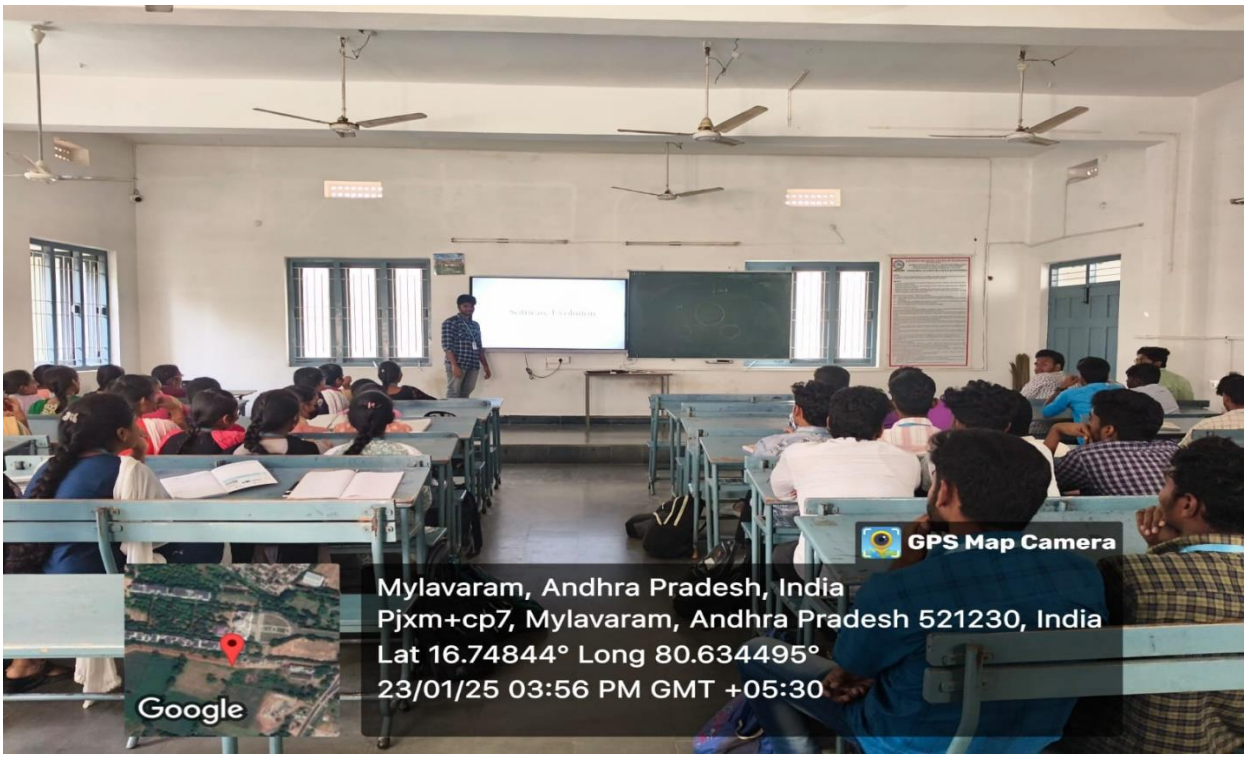
I used the following steps, to organize the activity in the class.

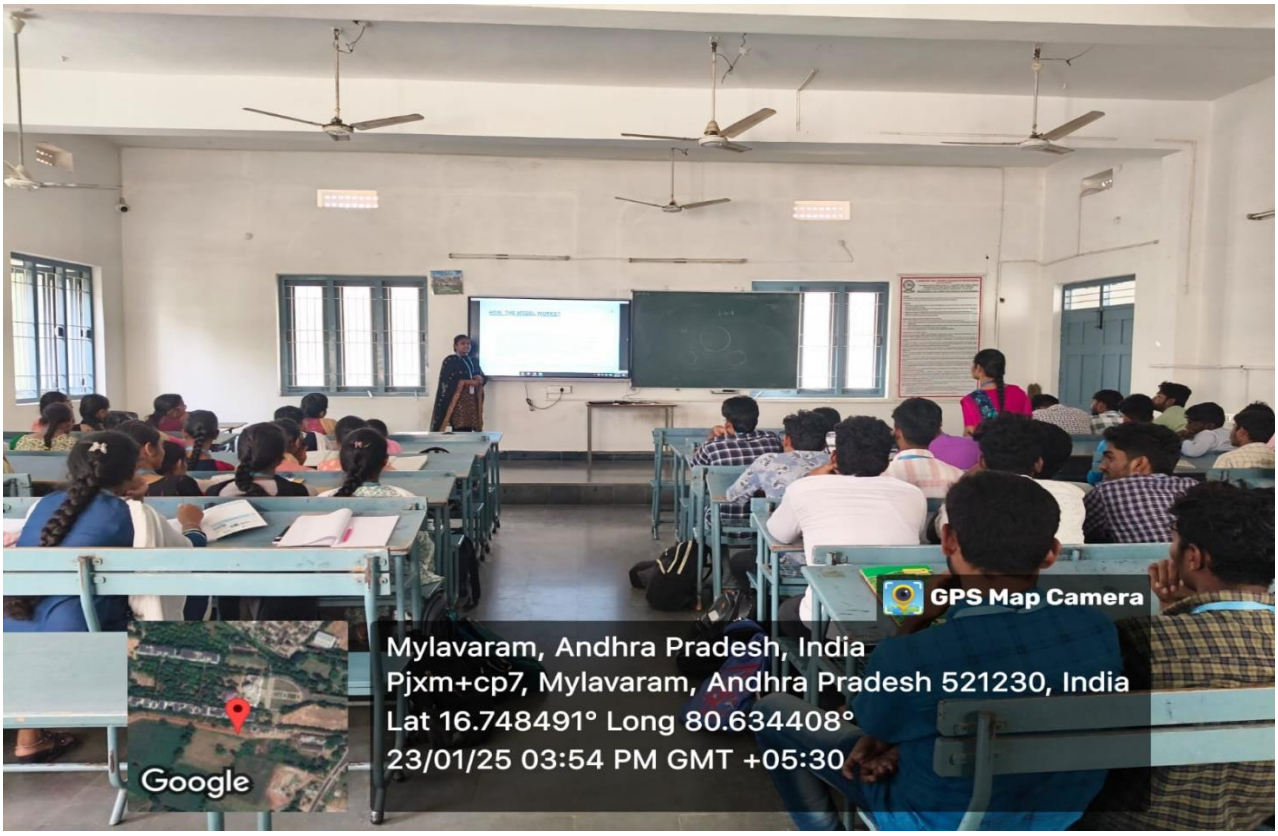
For each Student, We allotted one specific topic to give a presentation about Software Development Life cycle(SDLC), Characteristics of Software, Software Process models, Waterfall Model etc.., Importance of software Engineering.

5. **Details of participants in Seminar / Role-Play**

S.no	Roll number	Name	Topic
1	23761A05K6	B Rathna Bhargavi	Software engineering and its applications
2	23761A05L4	J Vinay Kumar	Evolution of software engineering
3	23761A05M0	K Siddeswar Reddy	Crises of Software Engineering
4	23761A05M7	L Rajesh	Changing nature of software Engineering
5	23761A05N2	M Kavya	SDLC, V-Model
6	23761A05N4	M Surender Reddy	Waterfall model and its extinction models

6. **Activity Proofs:**


GPS Map Camera
Mylavaram, Andhra Pradesh, India
Pjxm+cp7, Mylavaram, Andhra Pradesh 521230, India
Lat 16.74844° Long 80.634495°
23/01/25 03:56 PM GMT +05:30
Google


GPS Map Camera
Mylavaram, Andhra Pradesh, India
Pjxm+cp7, Mylavaram, Andhra Pradesh 521230, India
Lat 16.748491° Long 80.634408°
23/01/25 03:54 PM GMT +05:30
Google

Course Instructor

Dr. J. Nageswara Rao

Head of the Department

Dr. D Veeraiah

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details:

Course Name:	Database Management Systems
Course Code:	23CS03
Branch/Sem/Section:	CSE /IV /C
Academic Year:	2024-25
Faculty Name:	Mr.N V NAIK
Topic Selected:	Entity-Relationship Modeling
Date of Activity:	24-01-2025

1. **Selection of activity:**

   "In my course, I plan to implement **'Group Collaborative Thinking'** as an active learning activity. This approach helps learners develop interpersonal skills and work effectively as a team."

2. **List of outcomes associated with activity:**

In my course, the following outcomes are associated with the selected activity:

- Ability to think critically and create Entity-Relationship diagrams for various case studies.
- Improved individual and teamwork skills, communication, and report writing abilities with a focus on ethical values.

3. **Objectives of activity:**

The main objectives of this activity are as follows. A learner should be able to:

- Engage in activities that stimulate interest and motivation, contributing to a more enjoyable and effective learning experience.
- Collaborate and present work toward a common goal.
- Gain specific knowledge on the topics.

4. Details of participants in Group Collaborative thinking

Team No	Roll numbers	Case scenario for ER - Diagram
1	23761A05H1,5J1,5E7,5E2	Hospital database
2	23761A05H6, 5D6, 5I3, LE 17	Sales database
3	23761A05H8,5F6,5D7,5E0	Stock market

5. Activity Photos:

Mr.N V NAIK
Course Instructor

Dr.D.Veeraiah
Head of the Department

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(An Autonomous Institution since 2010)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details:

Course Name:	DBMS
Course Code:	23CS03
Branch/Sem/Section:	CSE /IV /C
Academic Year:	2024-25
Faculty Name:	Mr. N. V NAIK
Topic Selected:	Client server architecture, Constrains, different types of data models, applications of data modes, keys in relational models
Date of Activity:	29-01-2025

1. Selection of activity:

In my course, to conduct an active learning work, I plan to conduct **"Seminar".** This helps students in achieving objectives by improving individual presentation and analysis skills.

2. List of outcomes associated with activity:

In my course, the following outcomes are associated with the selected activity:

- Demonstrate the concept of client-server architecture.
- Explain different constraints.
- Analyze various types of models.
- Discuss different keys in relational data models.
- Explore various applications of databases.
- Improve individual and teamwork skills, communication, and ethical values.

3. Objectives of activity

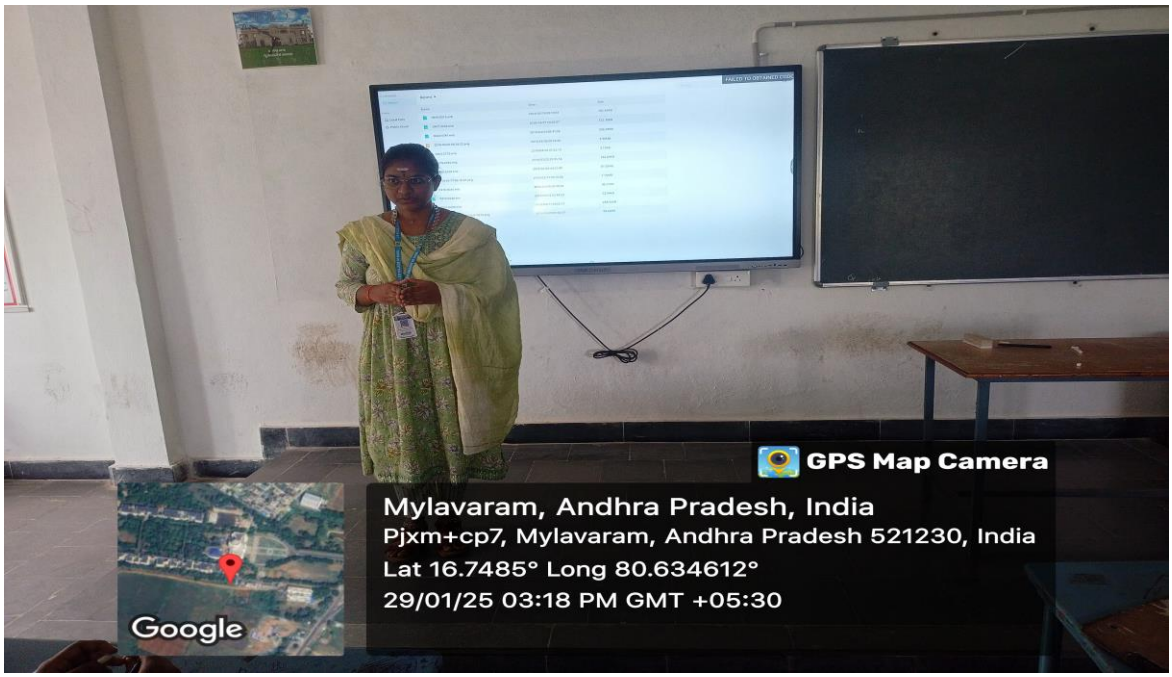
The main objectives of this activity are listed as follows. A learner able to:

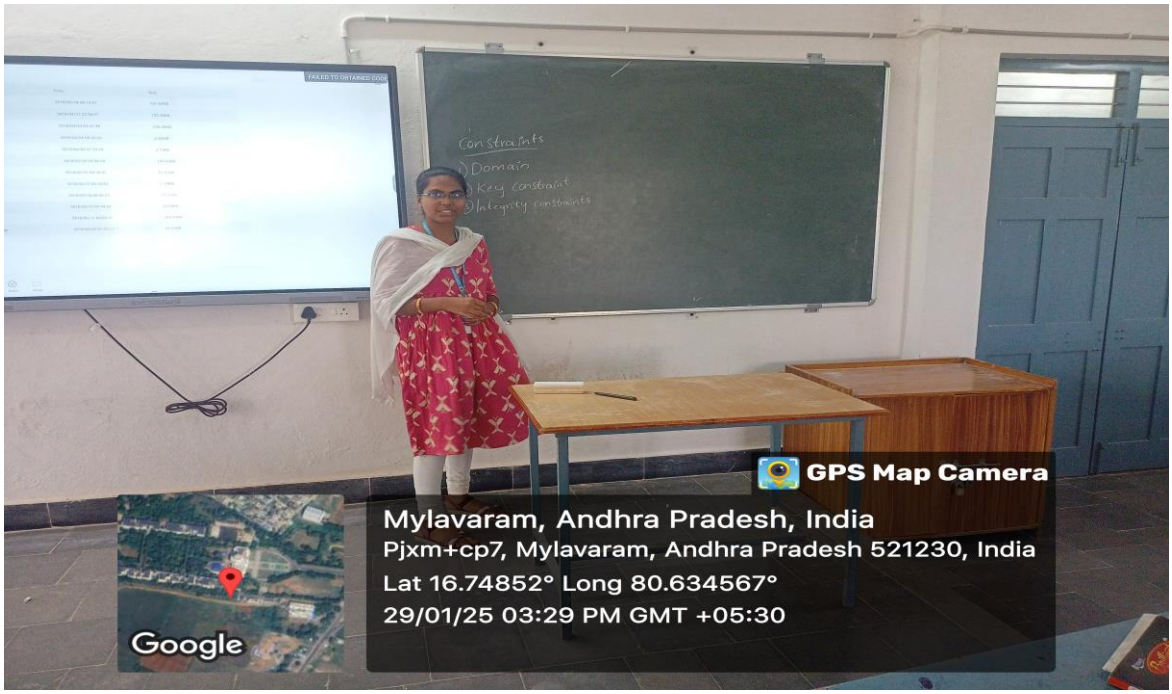
- Develop interpersonal communication skills.
- Know the conceptual clarity of the databases.
- Improve the presentation skills among the students.

4.Details of participants in Seminar / Role-Play

S.no	Roll number	Topic
1	**23761A05E8**	the concept of client-server architecture
2	**24765A0513**	keys in relational data models
3	**23761A05H1**	various types of models
4	**24765A0516**	Constraints(domain, key, integrity)
5	**23761A05E3**	applications of databases.

Activity Photos:






Database Applications
① Banking
② Education
③ Healthcare
④ E-commerce
⑤ Online Gaming
⑥ Real estate
GPS Map Camera
Mylavaram, Andhra Pradesh, India
Pjxm+cp7, Mylavaram, Andhra Pradesh 521230, India
Lat 16.748534° Long 80.634521°
29/01/25 03:50 PM GMT +05:30
Google


Different Types of Data Models:
1. ER Model
ER Model:
→ represents the data in the form of entities & attributes where entities are represented in rectangles & relationships are represented in diamonds
Eg: Student ER diagram.
GPS Map Camera
Mylavaram, Andhra Pradesh, India
Pjxm+cp7, Mylavaram, Andhra Pradesh 521230, India
Lat 16.748486° Long 80.634588°
29/01/25 03:44 PM GMT +05:30
Google

Course Instructor **Head of the Department**

(N. V NAIK) **(Dr. D. Veeraiah)**

LAKIREDDYBALIREDDYCOLLEGEOFENGINEERING

(AUTONOMOUS)
AccreditedbyNAACwith'A'Grade&NBA(UnderTier-I),
AnISO21001:2018,14001:2015,50001:2018CertifiedInstitution Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B.REDDYNAGAR,MYLAVARAM,NTRDIST.,A.P.-521 230.
hodcse@lbrce.ac.in,cseoffice@lbrce.ac.in,Phone:08659-222933,Fax:08659-222931

DEPARTMENTOFCOMPUTERSCIENCE&ENGINEERING

Activity Based Learning

Course Details:

Course Name:	**Operating System Lab**
Course Code:	23CS55
Branch/Sem/Section:	CSE/ IV Sem/D
Academic Year:	2024-25
Faculty Name:	Dr .B Siva Rama Krishna, Associate Professor ,CSE
TopicSelected:	**Dead lock and critical section problem**
DateofActivity:	03/12/24

Report on Activity-Based Learning in Operating System Lab

Selection of Activity: In my course, **Operating System Lab**, to conduct an active learning session, I plan to implement **"File System and Disk Management"**. Students will engage in hands-on activities such as file system structures, disk partitioning, disk scheduling algorithms, and file security configurations to enhance their practical OS skills.

List of Outcomes Associated with the Activity:

1. **Understanding of File System Components:**
   - Students will gain practical knowledge of file system structures, mounting, and directory management.
2. **Disk Partitioning and Storage Management:**
   - Students will learn how to create and manage disk partitions.
   - Understanding of different file systems such as FAT, NTFS, and EXT.
3. **Disk Scheduling Techniques:**
   - Ability to implement disk scheduling algorithms like FCFS, SSTF, SCAN, and C-SCAN.
   - Understanding the impact of disk scheduling on system performance.

4. **File Security and Access Control:**
    - Hands-on experience with file permissions and access control lists (ACLs).
    - Configuring security policies and encryption techniques for file protection.
5. **File System Performance Optimization:**
    - Learning techniques for improving file system efficiency such as defragmentation.
    - Exploring journaling file systems and their role in data integrity.

Objectives of Activity:

1. **Technical Skill Development:**
    - To familiarize students with file system functionalities like file storage, retrieval, and metadata management.
    - To teach implementation of disk partitioning, file permissions, and disk scheduling algorithms.
    - To introduce system utilities for managing file systems and disks.
2. **Storage and Data Management Knowledge:**
    - To provide hands-on experience in configuring and optimizing file storage.
    - To enable students to understand concepts such as disk fragmentation, journaling, and RAID systems.
3. **Problem-Solving and Troubleshooting:**
    - To enhance the ability to identify, analyze, and resolve file system-related issues.
    - To encourage a logical and systematic approach to disk management problem-solving.
4. **Practical Exposure to OS Tools:**
    - To give students hands-on experience with tools like Linux file system utilities, disk management tools, and performance monitoring software.
    - To introduce modern storage management tools used in the industry.
5. **Enhancing Creativity and Innovation:**
    - To inspire creativity by allowing students to design and implement custom file organization techniques.
    - To encourage innovative thinking in solving storage-related technical challenges.
6. **Teamwork and Communication Skills:**
    - To develop collaboration skills by working in groups on file system analysis or disk optimization tasks.
    - To improve technical communication through documentation and presentations of completed tasks.
7. **Foundation for Advanced Learning:**

- To lay the groundwork for understanding advanced topics in file system design and storage management.
- To bridge the gap between theoretical OS knowledge and real-world applications.

Conclusion: This activity-based learning approach in the Operating System Lab helps students grasp essential file system and disk management concepts through practical implementation. By actively engaging in file organization, disk scheduling, and security configurations, students develop technical expertise, problem-solving abilities, and collaboration skills, preparing them for real-world challenges in system administration and data management.

1. **ActivityPhotos:**

Course Instructor **Head of the Department**

Dr. B Siva Rama Krishna **Dr.D.Veeraiah**

LAKIREDDYBALIREDDYCOLLEGEOFENGINEERING

(AUTONOMOUS)
AccreditedbyNAACwith'A'Grade&NBA(UnderTier-I),
AnISO21001:2018,14001:2015,50001:2018CertifiedInstitution Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B.REDDYNAGAR,MYLAVARAM,NTRDIST.,A.P.-521 230.
hodcse@lbrce.ac.in,cseoffice@lbrce.ac.in,Phone:08659-222933,Fax:08659-222931

DEPARTMENTOFCOMPUTERSCIENCE&ENGINEERING

Activity Based Learning

Course Details:

Course Name:	**OPERATING SYSTEM LAB**
Course Code:	23CS55
Branch/Sem/Section:	CSE/ IV Sem/D
Academic Year:	2024-25
Faculty Name:	Dr. B. Siva Rama Krishna, Associate Professor, CSE
TopicSelected:	Interprocess Communication and Synchronization
DateofActivity:	03/12/24

Selection of Activity: In my course, **OPERATING SYSTEM LAB**, to conduct an active learning session, I plan to conduct an activity on "**Interprocess Communication and Synchronization**." Students will engage in hands-on activities such as implementing different interprocess communication (IPC) mechanisms, synchronizing processes using various techniques, and understanding concurrency control in operating systems. This activity will enhance their practical knowledge and technical skills in operating systems.

List of Outcomes Associated with Activity:

1. **Understanding of Interprocess Communication (IPC):**
   - Students will gain practical knowledge of different IPC mechanisms such as shared memory, message passing, and pipes.
2. **Process Synchronization Techniques:**
   - Students will learn synchronization methods like semaphores, mutexes, and monitors to coordinate multiple processes effectively.
3. **Concurrency Control and Deadlocks:**
   - Ability to understand and handle race conditions, deadlocks, and resource allocation issues in concurrent systems.

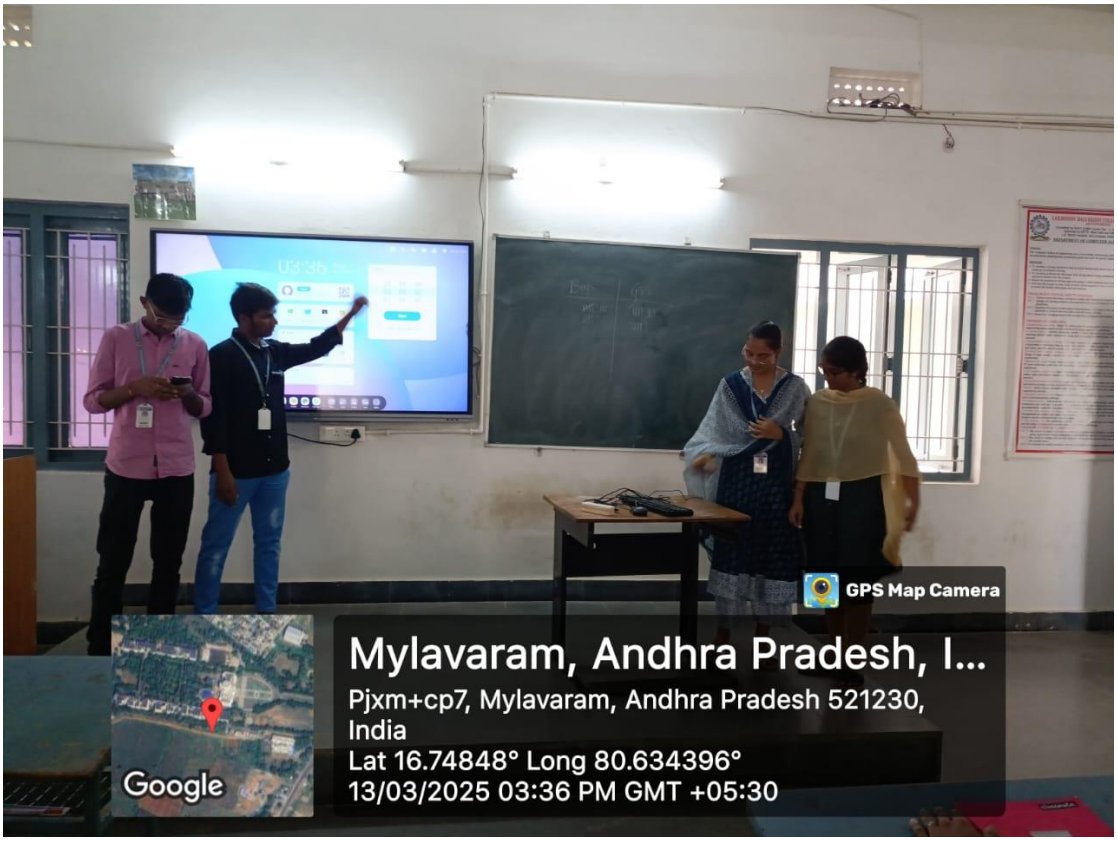
4. **Hands-on Experience with System Calls:**
   - Familiarity with system calls related to process creation, execution, and communication, such as fork(), exec(), wait(), and signal().

Objectives of Activity:

1. **Technical Skill Development:**
   - To familiarize students with various IPC mechanisms and their implementation.
   - To teach synchronization techniques for managing concurrent processes.
   - To introduce students to system-level programming using OS tools.
2. **Networking Knowledge (if applicable to IPC):**
   - To provide hands-on experience with network-based IPC methods like sockets and remote procedure calls (RPC).
   - To enable students to understand concepts such as client-server communication.
3. **Problem-Solving and Troubleshooting:**
   - To enhance the ability to identify, analyze, and resolve concurrency-related issues.
   - To encourage logical and systematic approaches to handling race conditions and deadlocks.
4. **Practical Exposure to OS Tools:**
   - To give students hands-on experience with OS tools like process managers, debuggers, and concurrency control utilities.
   - To introduce modern operating system tools and technologies used in the industry.
5. **Enhancing Creativity and Innovation:**
   - To inspire creativity by allowing students to design efficient IPC mechanisms.
   - To encourage innovative thinking in solving synchronization challenges.
6. **Teamwork and Communication Skills:**
   - To develop collaboration skills by working in groups on process synchronization tasks.
   - To improve technical communication through documentation and presentations of completed activities.
7. **Foundation for Advanced Learning:**
   - To lay the groundwork for understanding advanced topics in operating systems.
   - To bridge the gap between theoretical knowledge and real-world applications of concurrency and process management.

By conducting this activity, students will gain practical exposure to crucial operating system concepts, preparing them for further studies and professional challenges in computer science and engineering.

1. **ActivityPhotos:**



Course Instructor **Head of the Department**

Dr. B. Siva Rama Krishna **Dr.D.Veeraiah**

LAKIREDDYBALIREDDYCOLLEGEOFENGINEERING

(AUTONOMOUS)
AccreditedbyNAACwith'A'Grade&NBA(UnderTier-I),
AnISO21001:2018,14001:2015,50001:2018CertifiedInstitution Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B.REDDYNAGAR,MYLAVARAM,NTRDIST.,A.P.-521 230.
hodcse@lbrce.ac.in,cseoffice@lbrce.ac.in,Phone:08659-222933,Fax:08659-222931

DEPARTMENTOFCOMPUTERSCIENCE&ENGINEERING

Activity Based Learning

Course Details:

Course Name:	**OPERATING SYSTEM LAB**
Course Code:	23CS55
Branch/Sem/Section:	CSE/ IV Sem/D
Academic Year:	2024-25
Faculty Name:	Dr. B Siva Rama Krishna, Associate Professor, CSE
Topic Selected:	System Configuration and Process Management
Date of Activity:	03/12/24

Report on Activity-Based Learning in Operating System Lab

Selection of Activity: In my course, **Operating System Lab**, to conduct an active learning session, I plan to implement **"System Configuration and Process Management"**. Students will engage in hands-on activities such as process scheduling, memory management, inter-process communication, and security configurations to enhance their practical OS skills.

List of Outcomes Associated with the Activity:

1. **Understanding of Operating System Components:**
   - Students will gain practical knowledge of OS components such as process management, memory management, and file systems.
2. **Process Management and Scheduling:**
   - Students will learn how to create, manage, and terminate processes.
   - Implementation of CPU scheduling algorithms like FCFS, SJF, and Round Robin.
3. **Memory Management Techniques:**
   - Ability to implement memory allocation strategies like paging and segmentation.
   - Understanding of virtual memory and page replacement policies.

4. **Inter-Process Communication (IPC):**
    - Familiarity with IPC mechanisms like message queues, shared memory, and semaphores.
5. **File System Management:**
    - Hands-on experience in file creation, directory management, and disk scheduling algorithms.
6. **Security and Access Control:**
    - Configuring user permissions, authentication, and encryption techniques for secure OS operations.

Objectives of Activity:

1. **Technical Skill Development:**
    - To familiarize students with OS functionalities like process, memory, and file management.
    - To teach implementation of scheduling and synchronization techniques.
    - To introduce system calls and shell scripting for automation.
2. **Networking Knowledge:**
    - To provide hands-on experience in configuring and managing network settings.
    - To enable students to understand concepts such as IP addressing, DNS, and network troubleshooting.
3. **Problem-Solving and Troubleshooting:**
    - To enhance the ability to identify, analyze, and resolve OS-related issues.
    - To encourage a logical and systematic approach to system problem-solving.
4. **Practical Exposure to OS Tools:**
    - To give students hands-on experience with tools like Linux command-line utilities, debuggers, and system monitoring tools.
    - To introduce modern OS-related tools used in the industry.
5. **Enhancing Creativity and Innovation:**
    - To inspire creativity by allowing students to design and implement custom shell scripts.
    - To encourage innovative thinking in solving OS-related technical challenges.
6. **Teamwork and Communication Skills:**
    - To develop collaboration skills by working in groups on process scheduling simulations or system configuration tasks.
    - To improve technical communication through documentation and presentations of completed tasks.
7. **Foundation for Advanced Learning:**

- To lay the groundwork for understanding advanced topics in operating systems, such as virtualization and distributed systems.
- To bridge the gap between theoretical OS knowledge and real-world applications.

Conclusion: This activity-based learning approach in the Operating System Lab helps students grasp essential OS concepts through practical implementation. By actively engaging in system configurations, process management, and troubleshooting, students develop technical expertise, problem-solving abilities, and collaboration skills, preparing them for real-world challenges in system administration and software development.

.

Activity Photos

Course Instructor **Head of the Department**

Dr. B Siva Rama Krishna **Dr.D.Veeraiah**

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details:

Course Name:	Software Engineering
Course Code:	23IT02
Branch/Sem/Section:	CSE /IV /C
Academic Year:	2024-25
Faculty Name:	B.NIROSHA
Topic Selected:	Agile Development Methodology
Date of Activity:	06-01-2025

1.Selection of activity:

During **Software Engineering** course, I planned to conduct a one activity-based learning task with students that is **"Role-play ".** This activity helps the students to gain knowledge about the **AGILE DEVELOPMENT METHODOLOGY** development process model and more about **Agile Development Model** is an iterative and flexible approach to software development that emphasizes **collaboration**, **frequent delivery**, and **continuous improvement** through **sprints** (short development cycles).

2.List of outcomes associated with activity:

In my course, the following outcomes are associated with the selected activity.

- Developing Components for the given Application.
- Improve individual/teamwork, communication & report writing skills with ethical values.

3. Objectives of activity

The main objectives of this activity are listed as follows. A learner able to:

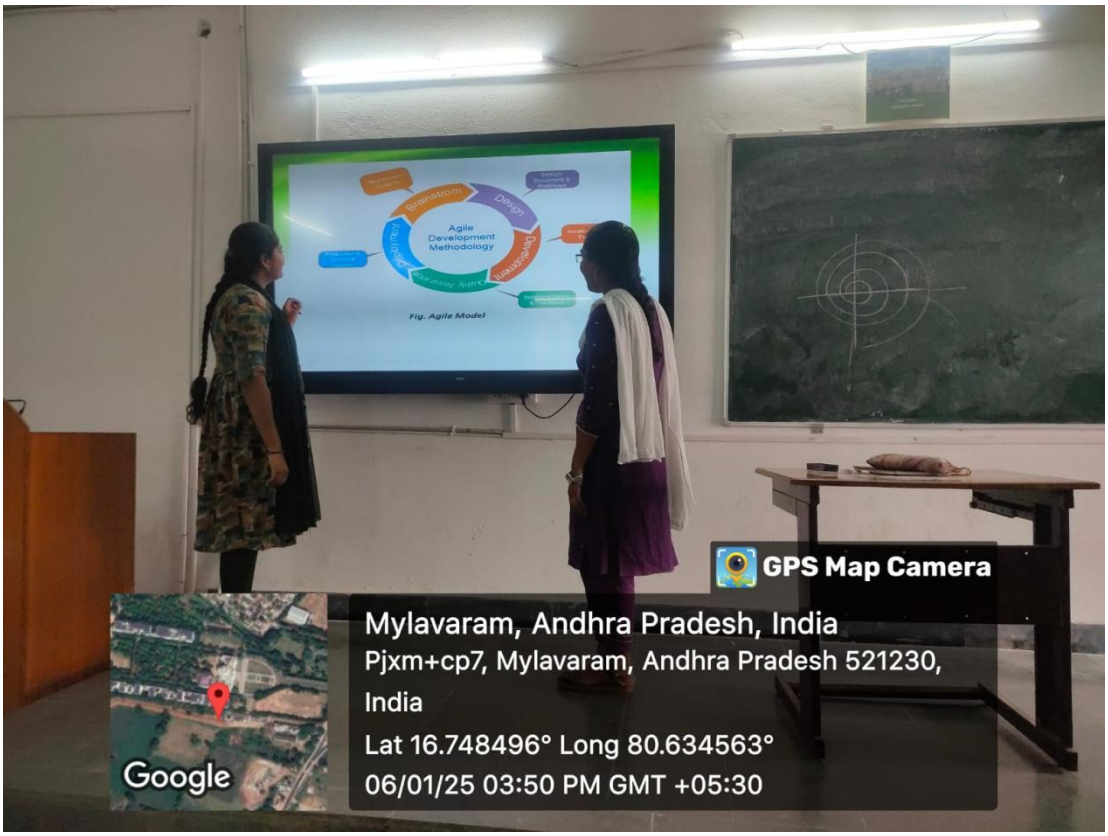
- Develop interpersonal communication.
- Develop and contribute towards a common goal.
- Acquire specific knowledge on the topic.

These outcomes collectively contribute to the successful development, manufacturing, and delivery of a product while ensuring it meets quality standards, complies with regulations, and is economically viable.

4.Details of participants in Role-Play

S.no	Roll number	Name	Topic
1	23761A05E3	D.Meenakshi	She was given information about AGILE METHODOLOGY
2	24765A0516	Shaik.Haifa Tabusum	She was given information about advantages and disadvantages of Agile methodology

1. **Activity Photos:**



B.Nirosha **Dr.D.Veeraiah**

Course Instructor **Head of the Department**

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details:

Course Name:	Software Engineering
Course Code:	23IT02
Branch/Sem/Section:	CSE /IV/C
Academic Year:	2024-25
Faculty Name:	B.NIROSHA
Topic Selected:	Responsibilities of Software project manager ,COCOMO Model
Date of Activity:	31-01-2025

1.Selection of activity:

During **Software Engineering** course, I planned to conduct a one activity-based learning task with students that is **"Role-play and Seminar".** This activity helps the students to gain knowledge about the software development process and much more about the Responsibilities of project manager. And COCOMO Model

2.List of outcomes associated with activities:

The outcomes of Responsibilities of project manager and cost estimation of project by using COCOMO Model. However, here is a generalized list of project estimation and responsibilities of project manager:

These outcomes collectively contribute to the successful development, manufacturing, and delivery of a product while ensuring it meets quality standards, complies with regulations, and is economically viable.

3.Objectives of Activity:

The main objectives of this activity are listed as follows.

- Involves with the senior managers in the process of appointing team members.
- Builds the project team and assigns tasks to various team members.
- Responsible for effective project planning and scheduling, project monitoring and control activities in order to achieve the project objectives.
- Acts as a communicator between the senior management and the development team and internal and external stakeholders.
- Effectively resolves issues that arise between the team members by changing their roles and responsibilities.
- Modifies the project plan (if required) to deal with the situation.

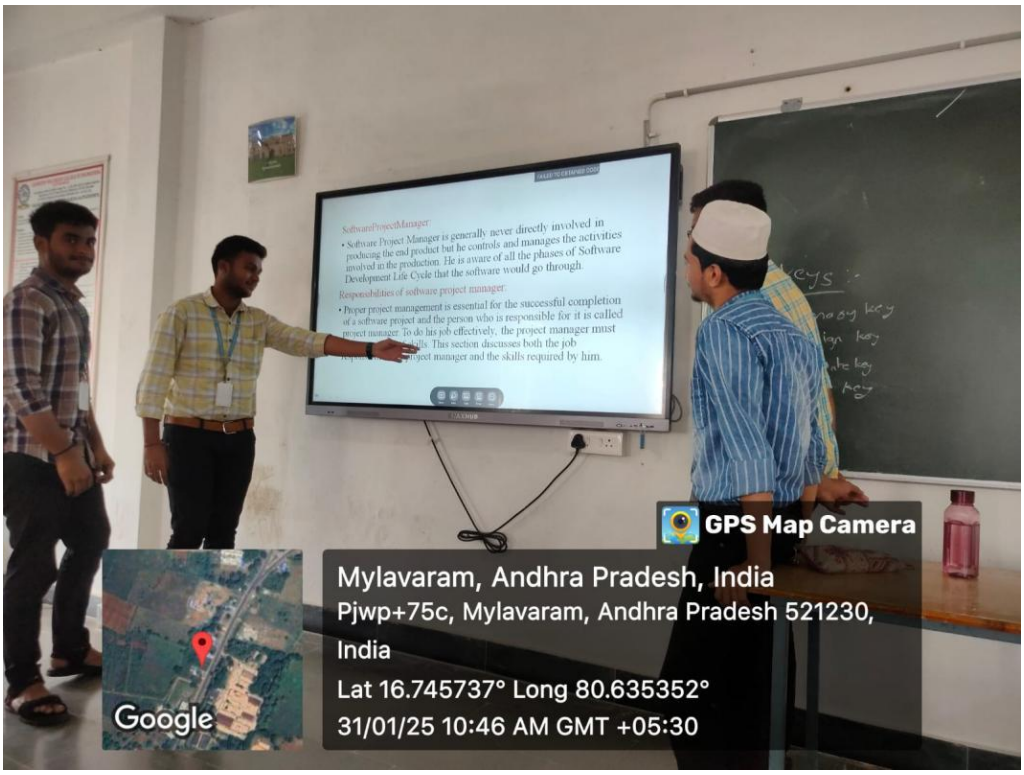
COCOMO MODEL:

The COCOMO Model is a procedural cost estimate model for software projects and is often used as a process of reliably predicting the various parameters associated with making a project such as size, effort, cost, time, and quality. It was proposed by Barry Boehm in 1981 and is based on the study of 63 projects, which makes it one of the best-documented models.
The key parameters that define the quality of any software product, which are also an outcome of COCOMO, are primarily effort and schedule:

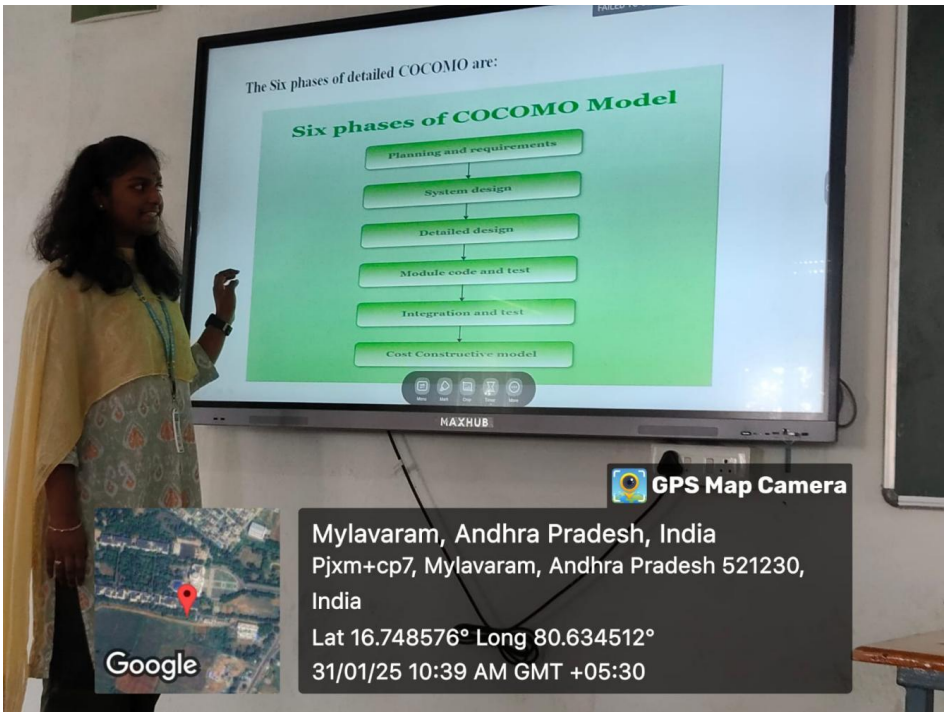
4.Details of participants in Role-Play and Seminar

S.no	Roll number	Name	Topic
1	23761A05F8	K.Swaroop Reddy	He was given information about project manager
2	23761A05J7	Y.Venkat	He was given information about responsibilities of manager
3	23761A05E9	Irfan Jan Khan	He was given information about advantages
4	24761A0513	G.Sai Baba	He was given information about how we able to implement in project
5.	23761A05H8	M.Raga Pranathi	She gave Seminar on COCOMO MODEL

1. **Activity Photos:**



2.cocomo model



B.Nirosha **Dr.D.Veeraiah**

Course Instructor **Head of the Department**

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Activity Based Learning Report

Course Details:

Course Name:	Full Stack Development-I
Course Code:	23CSS2
Branch/Sem/Section:	CSE/IV /A & B
Academic Year:	2024-25
Faculty Name:	Mr. A. Sudhakar
Topic Selected:	Java Script Validation
Date of Activity:	04-04-2025

1. **Selection of activity:**

   In my course, to conduct an active learning work, I plan to conduct **"Seminar".** This helps students in achieving objectives by improving individual presentation and analysis skills.

2. **List of outcomes associated with activity:**

   In my course, the following outcomes are associated with the selected activity.

   - Acquire knowledge of **Java Script of the Full Stack Development**. Students will also be able to design different types of Validations to meet the requirements of the realistic constraints of Webpage.

3. **Objectives of activity:**

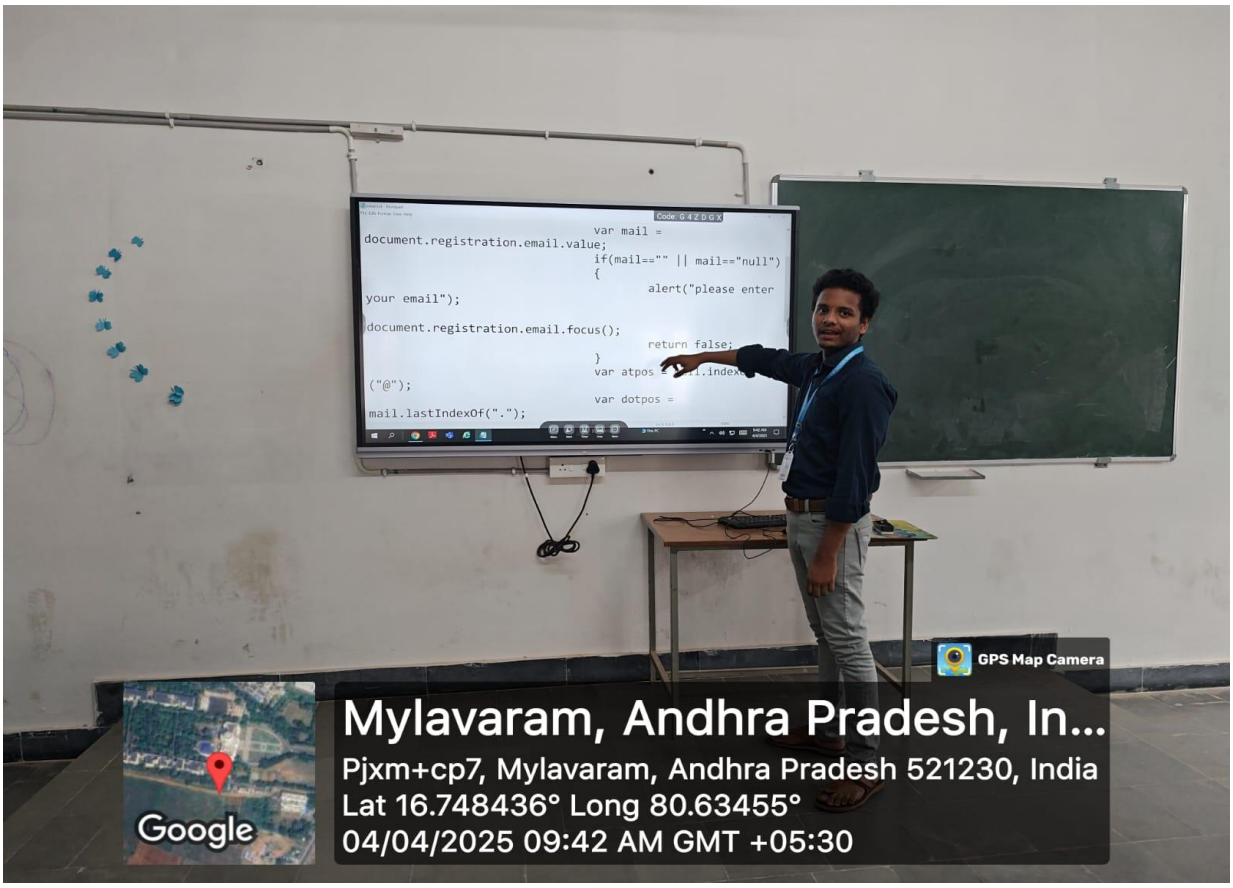
   The main objectives of this activity are listed as follows. A learner able to:

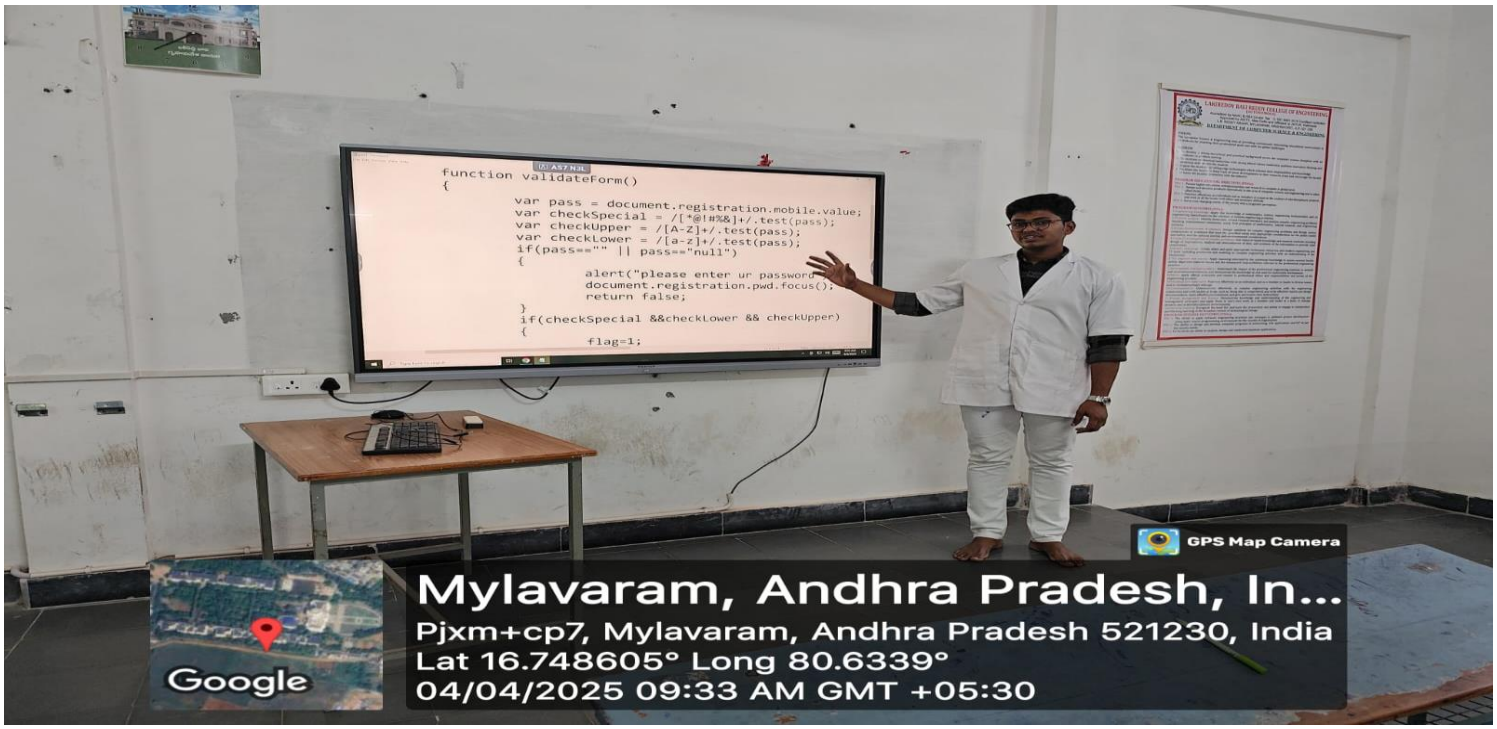
   - Understand the **Java Script and Validation** .
   - Acquire specific knowledge on the topic.

4. **Details of participants in Seminar / Role-Play:**

S.No	Roll Number	Name of the Student	Topic
1.	23761A0518	ILIPILLA KARTHIK	Java Script Validation
2.	23761A0599	KOMMANABOYINA SUBBA RAO	Java Script Validation

5. Activity Photos:





Course Instructor **Head of the Department**

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details:

Course Name:	Software Engineering
Course Code:	23IT02
Branch/Sem/Section:	CSE /IV /A
Academic Year:	2024-25
Faculty Name:	Ms. T. Vineetha
Topic Selected:	Presentation on Software Development Life cycle(SDLC), Characteristics of Software, Software Process models, Waterfall Model etc..,
Date of Activity:	23-01-202

1. **Selection of activity:**

In my course, to conduct an active learning work, I plan to conduct **"Seminar and Roleplay".** This helps students in achieving objectives with improving individual presentation and analysis skills.

2. **List of outcomes associated with activity:**

In my course the following outcomes are associated with the selected activity.

- Student can Understand the concept of Software Development Life cycle(SDLC) and working process of SDLC.
- Improve individual / team work skills, communication & report writing skills with ethical values.

3. **Objectives of activity:**

The main objectives of this activity are listed as follows. A learner able to:

- Develop interpersonal communication.
- Develop and contribute towards a common goal.
- Acquire specific knowledge on the topic.

4. **procedure to conduct an activity:**

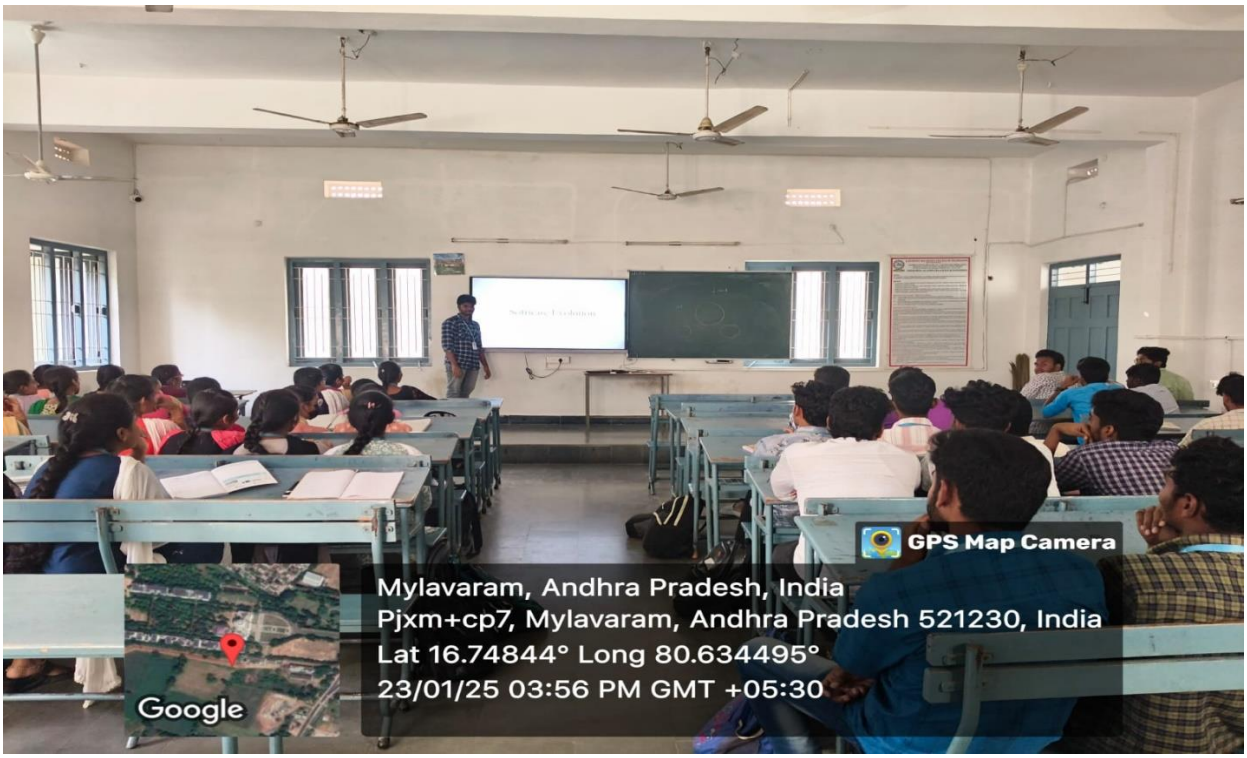
I used the following steps, to organize the activity in the class.

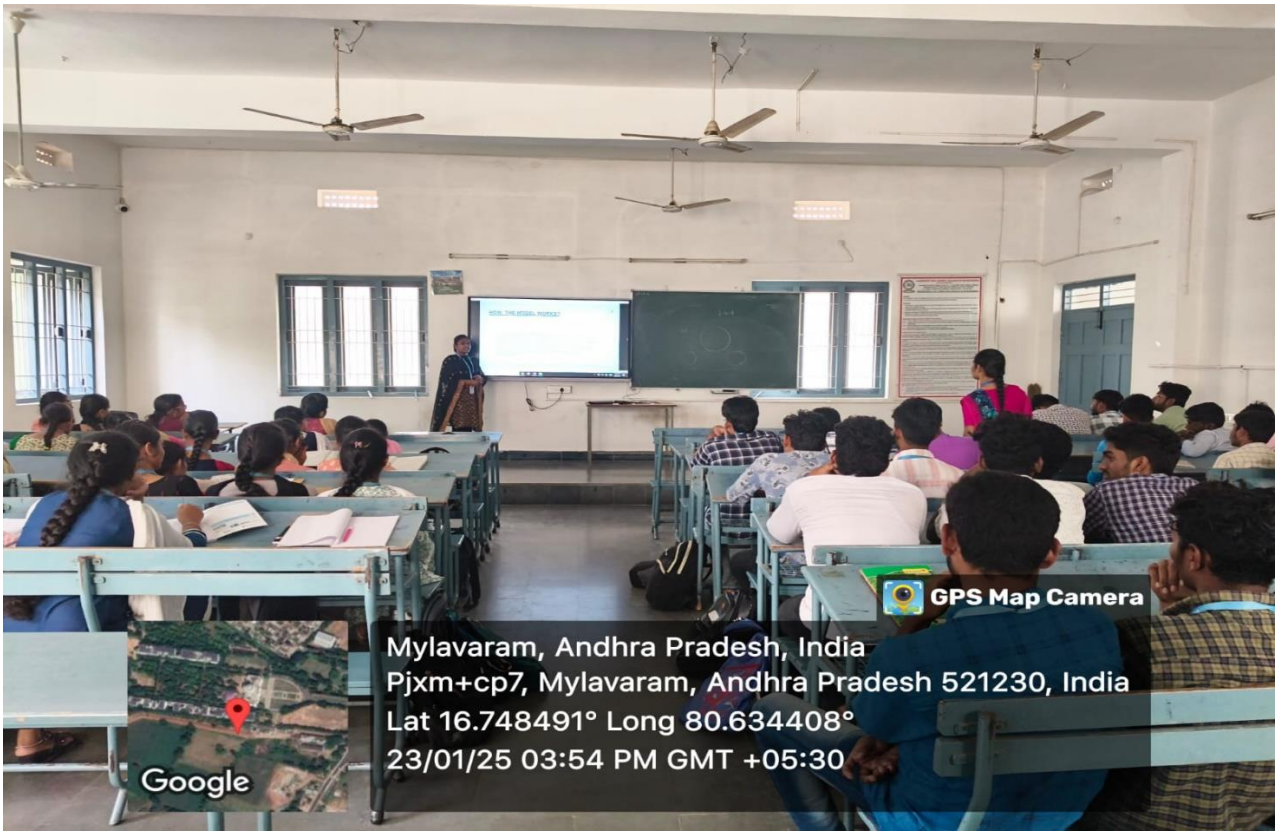
For each Student, We allotted one specific topic to give a presentation about Software Development Life cycle(SDLC), Characteristics of Software, Software Process models, Waterfall Model etc.., Importance of software Engineering.

5. **Details of participants in Seminar / Role-Play**

S.no	Roll number	Name	Topic
1	23761A0509	C Sai Sanjana	Software engineering and its applications
2	23761A0512	G Udaya Venkata Reddy	Evolution of software engineering
3	23761A0522	K Sai Surendra	Crises of Software Engineering
4	23761A0537	M Bhavya Keerthana	Changing nature of software Engineering
5	23761A0538	M Venkata Gopi Chaitanya	SDLC, V-Model
6	23761A0541	P Priya Kavya Sudha	Waterfall model and its extinction models
7	24765A0502	Ch Revanth Naga Sai	Agile model
8	24765A0504	K Chandrika	Spiral Model

6. **Activity Proofs:**


GPS Map Camera
Mylavaram, Andhra Pradesh, India
Pjxm+cp7, Mylavaram, Andhra Pradesh 521230, India
Lat 16.74844° Long 80.634495°
23/01/25 03:56 PM GMT +05:30
Google


GPS Map Camera
Mylavaram, Andhra Pradesh, India
Pjxm+cp7, Mylavaram, Andhra Pradesh 521230, India
Lat 16.748491° Long 80.634408°
23/01/25 03:54 PM GMT +05:30
Google

Course Instructor **Head of the Department**

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details:

Course Name:	Software Engineering
Course Code:	23IT02
Branch/Sem/Section:	CSE /IV /A
Academic Year:	2023-24
Faculty Name:	Ms. T Vineetha
Topic Selected:	Constructing UML diagrams like Class, Sequence, Use case, Component, deployment diagrams for the given case studies like Railway Reservation system, Online food ordering system, Online Shopping system etc..
Date of Activity:	14-02-2025

1. **Selection of activity:**

In my course, to conduct a collaborative work, I plan to conduct **"Student-Team-Achievement-Divisions (STAD)".** The advantage of using STAD is students work collectively in achieving objectives by safeguarding the norms of the group.

2. **List of outcomes associated with collaborative activity:**

In my course the following outcomes are associated with the selected collaborative activity (STAD).

- Constructing Sequence Diagram for Online food ordering system
- Improve individual / teamwork skills, communication & report writing skills with ethical values.

3. **Objectives of Collaborative activity:**

The main objectives of collaborative activity are listed as follows. A learner able to:

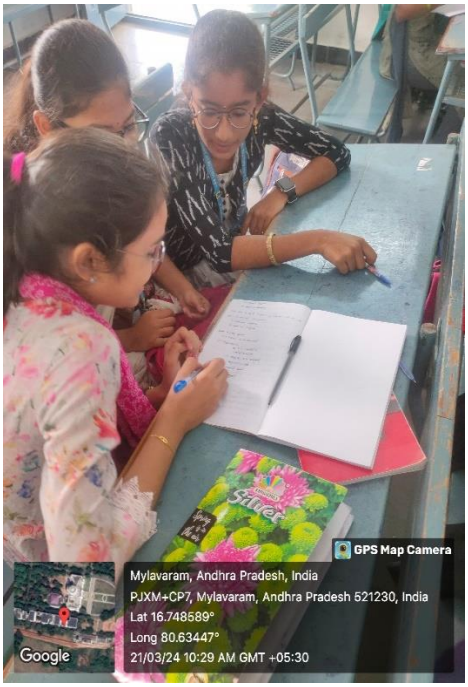
- Develop interpersonal communication.
- Develop and contribute towards a common goal.
- Acquire specific knowledge on the topic.

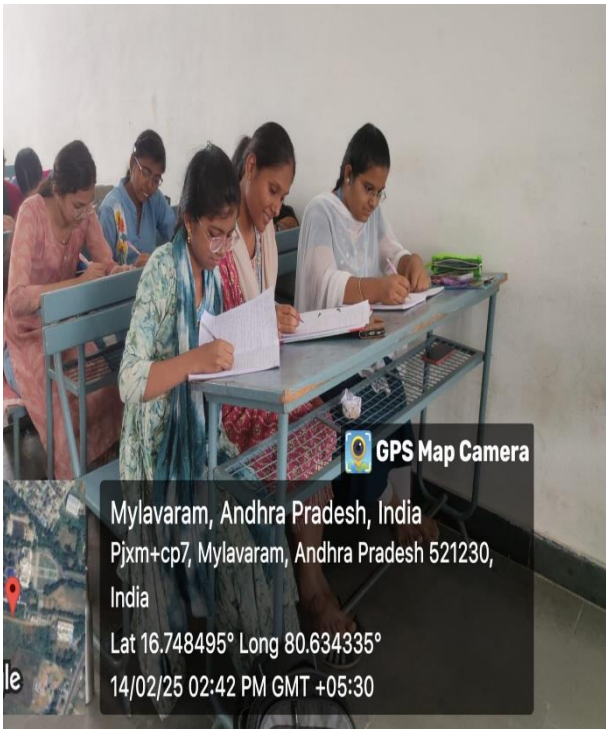
4. **procedure to conduct an activity:**

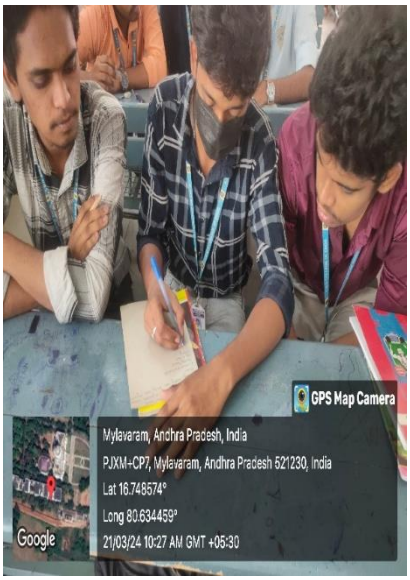
I used the following steps, to organize the Student-Team-Achievement-Divisions (STAD) activity in the class.

For each Student, We allotted one specific topic to Design uml diagrams (Class, Sequence, Use case, Component, deployment diagrams) for the given case studies like Railway Reservation system, Online food ordering system, Online Shopping system etc..

5. Activity Proofs:



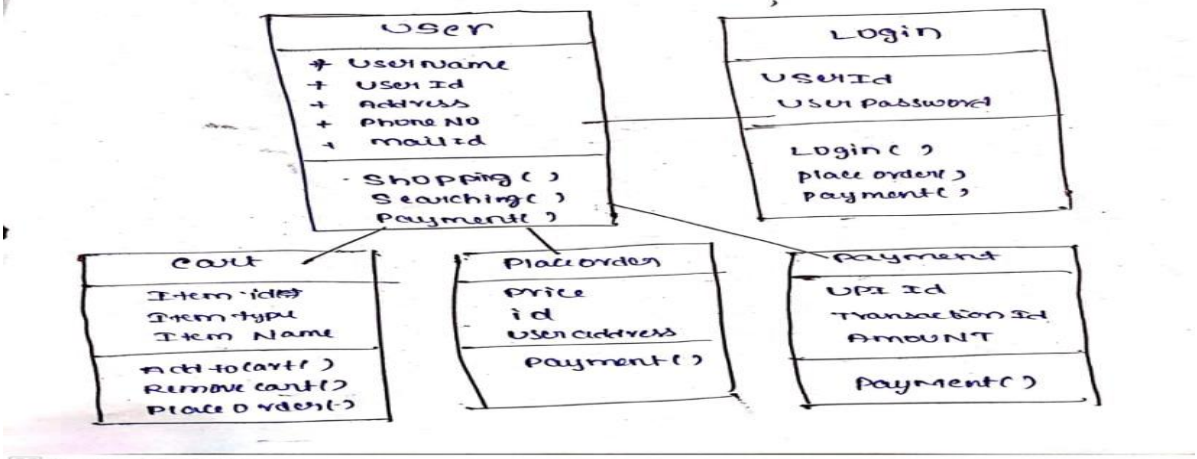


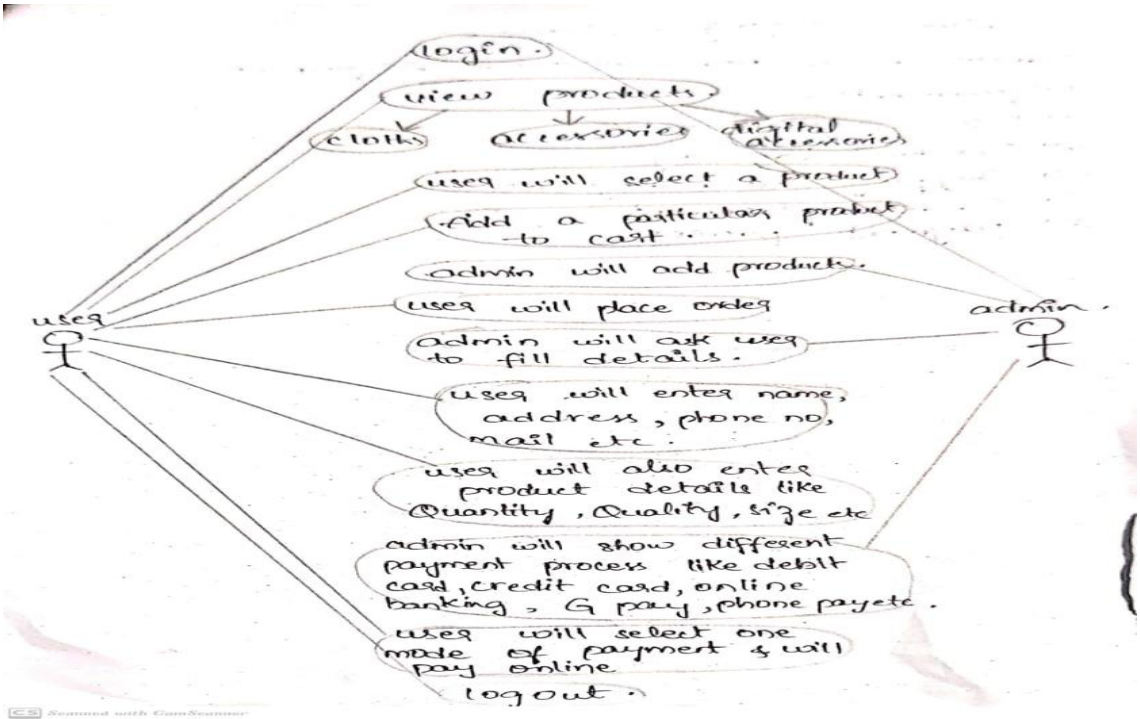


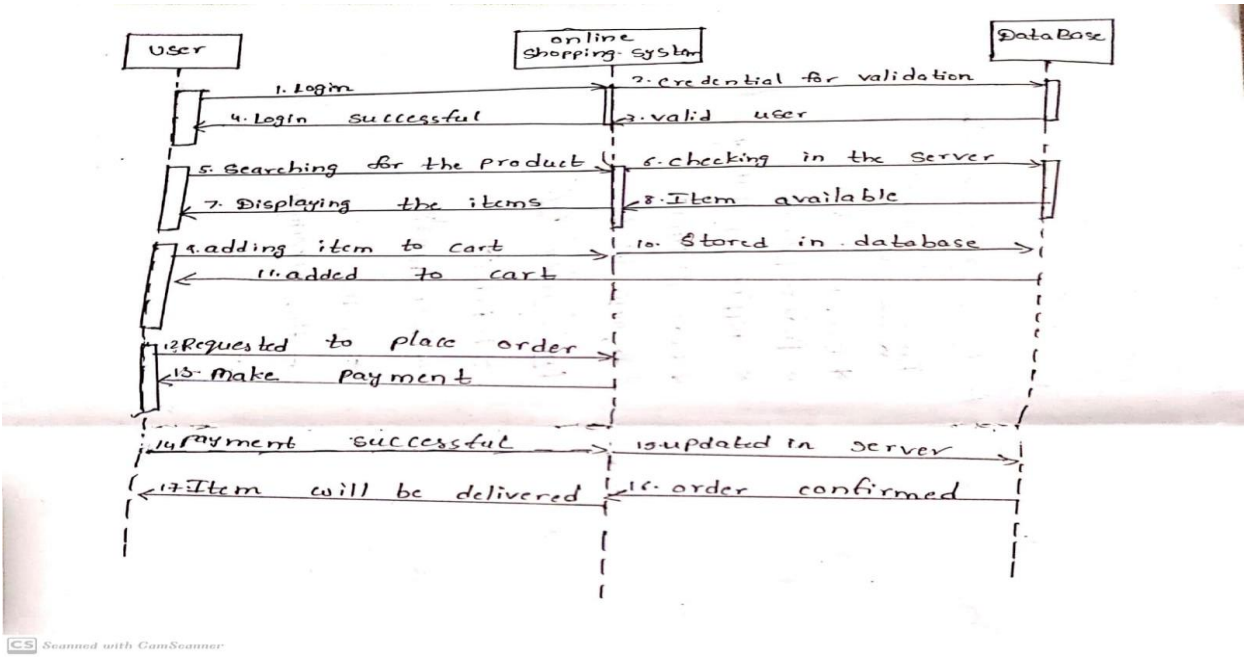
ROLL NO - 33, 24, 22.

Requirement gathering:-

① User Registration
② search process
③ shopping cart management
④ Place order
⑤ Payment process







Course Instructor **Head of the Department**

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(An Autonomous Institution since 2010)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details

Course Name	DATABASE MANAGEMENT SYSTEMS
Course Code	23CS03
Branch/Sem/Section	CSE /IV /D
Academic Year	2024-25
Faculty Name	Dr. P. Bhagath
Topic Selected	**Datathon (**Physical Database Implementation using SQL)
Date of Activity	27-01-2025

1. Description of the activity

An event called Datathon which helps students to understand the implementation stage of the physical database was organized on 27/01/25. In this activity, the students were divided into 10 teams in which each team consisted of 5 or 6 members. The entire event is divided into a number of rounds. In each round, a target is given to the teams. An evaluation will be carried out after each round. The teams who complete the given task in a prescribed time will be considered winners of the round.

The details of the targets for each round are given below:

Round Number	Activity
1	Creating the database structure
2	Data insertion into the tables
3	Writing the first query
4	Completing 50% of the given queries
5	Completing 75% of the given queries
6	Completing 100% of the given queries

Winners are different stages are as follows:

Round Number	Activity
1	Creating the database structure 2:16 PM ● Trisha (First) ● Aqball (Second)
2	Data insertion into the tables 2:32 Pm ● Mounika (First) ● Trisha (Second) ● Rishmitha (Third) ● Rehman (Fourth)
3	Writing the first query ● Koushik ● Sri Charan ● K. Mounkia
4	Completing 50% of the given queries 2:42 PM ● Koushik completed at 2:42 PM ● Mounika completed at 2:44 PM
5	Completing 75% of the given queries 2:57 PM ● Koushik ● Karthik
6	Completing 100% of the given queries ● Karthik ● Mounkia

2. List of outcomes associated with activity

The following outcomes are expected with the selected activity.

- Competition among the students to learn SQL for implementing physical database
- Covers fundamental concepts of database implementation techniques
- Improve individual/teamwork, and communication skills with ethical values.

3. Objectives of activity

The main objectives of this activity are listed as follows. A learner will be able to:

- Identify the basic structure of a database
- Defining constraints in a physical database schema
- Write queries for various requirements of database operations

4. Example Exercise problems

Exercise 5.4 Consider the following relational schema. An employee can work in more than one department; the pct time field of the Works relation shows the percentage of time that a given employee works in a given department.

Emp(eid: integer, ename: string, age: integer, salary: real)
Works(eid: integer, did: integer, pct time: integer)
Dept(did: integer, budget: real, managerid: integer)

Write the following queries in SQL:
1. Print the names and ages of each employee who works in both the Hardware department and the Software department.

2. For each department with more than 20 full-time-equivalent employees (i.e., where the part-time and full-time employees add up to at least that many full-time employees), print the did together with the number of employees that work in that department.

3. Print the name of each employee whose salary exceeds the budget of all of the departments that he or she works in.

4. Find the managerids of managers who manage only departments with budgets greater than $1,000,000.

5. Find the enames of managers who manage the departments with the largest budget.

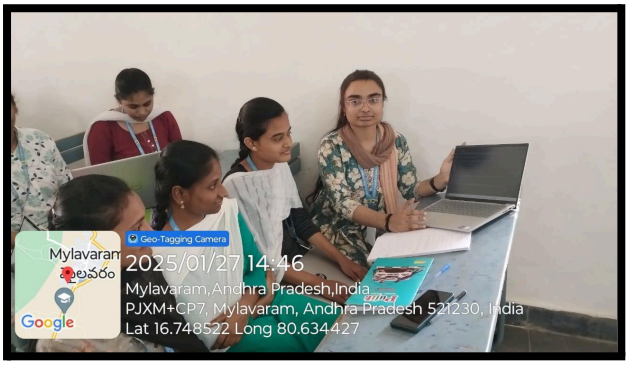
6. If a manager manages more than one department, he or she controls the sum of all the budgets for those departments. Find the managerids of managers who control more than $5,000,000.

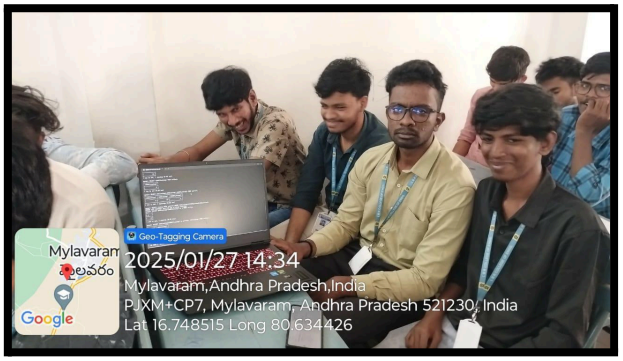
7. Find the managerids of managers who control the largest amount.

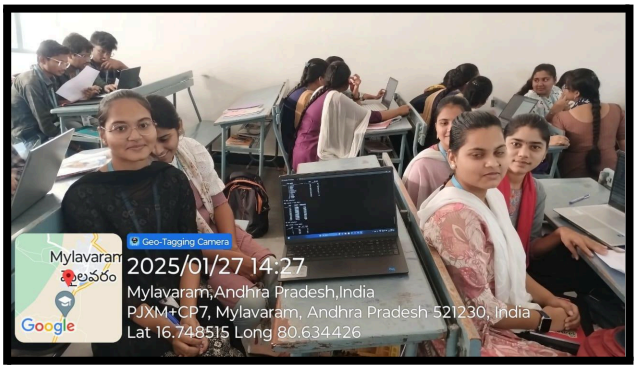
5. Details of the Participants

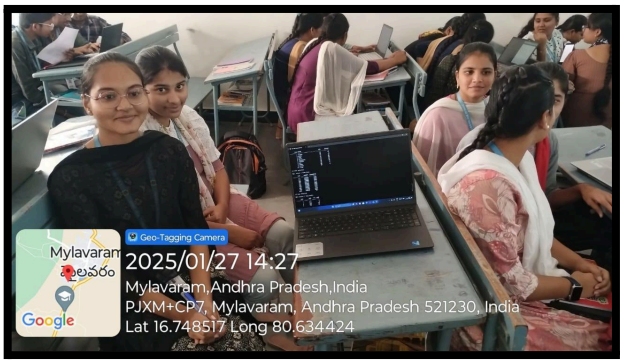
Team 1: K. Mounika A.Teja Naga Rupa G. Sravanthi V. Tirapathamma N. Geethanvitha	**Team 2:** M. Jyohthirmayi T. Lasya Manogna M. Niharhini V. Harika K. Srivalli	**Team 3:** N. Rasali Reddy K. Sirisha B. Ratna Bhargavi T. Harshitha	**Team 4:** L. Rajesh M. Surendra Reddy Md. Aqbal
Team 5: Sk. Atiq Rehaman A. Mahesh R.Akhil Ch. Phani Prasad K. Sideswar Reddy	**Team 6:** B. Vinodini J. Roja M. Harshitha B. Rishmitha M. Himasri	**Team 7:** P. Likhitha K. Keerhi K. Mounika G. Lahari K. Trisha K. Kavya	**Team 8:** Shreshtha Charitha Prasanna Maheen Usha Riyaz
Team 9: Koushik Vinay Uday Yash Narasimha Satish Trinesh	**Team 10:** Karthik Lokesh Revanth Naveen Surya	**Team 11:** S. Mohan Reddy K. Uttam Vamsi Sri Charan Vaibhav Surya	

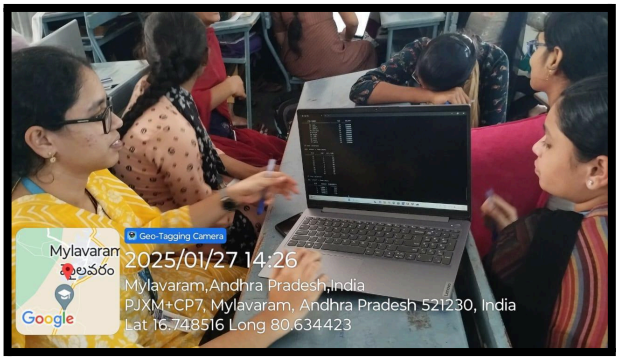
5. Activity Photos

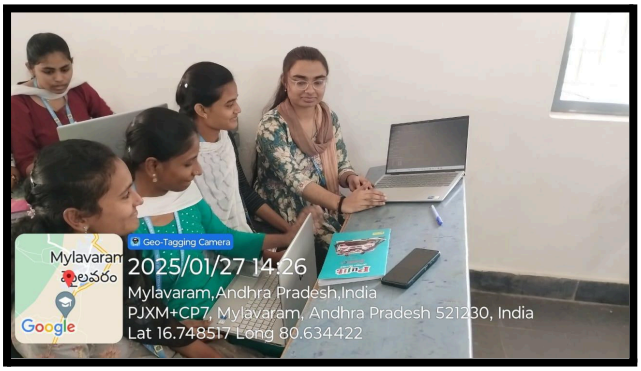


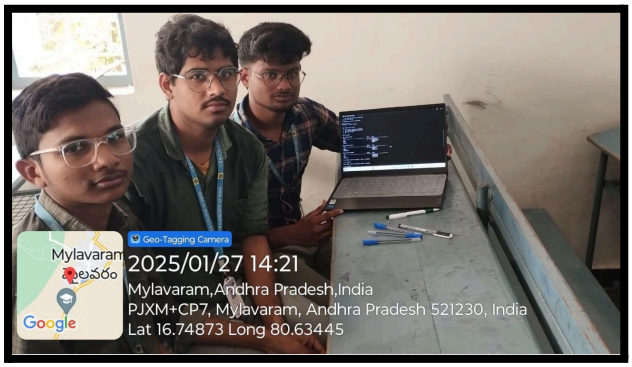












Course Instructor **Head of the Department**

(Dr. P. Bhagath) **(Dr. D. Veeraiah)**

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(An Autonomous Institution since 2010)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details

Course Name	DATABASE MANAGEMENT SYSTEMS
Course Code	23CS03
Branch/Sem/Section	CSE /IV /D
Academic Year	2024-25
Faculty Name	Dr. P. Bhagath
Topic Selected	Fundamentals of databases
Date of Activity	02-01-2025

1. Description of the activity

A **quiz** that covers preliminaries of the database systems was conducted on 02/01/25. In this activity, the students were divided into 3 teams (**Champions, Mufasa, and Turing girls**) consisting of an equal number of team members. The quiz comprises two rounds (Basic and advanced). In the basic round, each team will be given a question. If a team can't give the right answer, the question will not be passed to another team. In the advanced round, a question is open to all the teams. The team that chooses to answer first will be given the opportunity first. And every other team can answer the question. The first team that answers the right answer will be awarded. During the event, chocolates were given as rewards to each team for each right answer to each team.

2. List of outcomes associated with activity

The following outcomes are expected with the selected activity.

- Competition among the students to learn fundamentals
- Covers fundamental concepts of databases such as phases of database design and operations on the database.
- Improve individual/teamwork, and communication skills with ethical values.

3. Objectives of activity

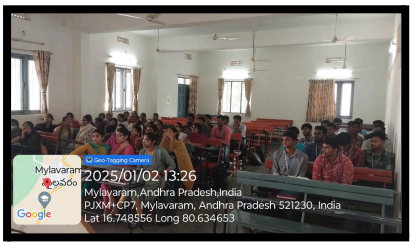
The main objectives of this activity are listed as follows. A learner able to:

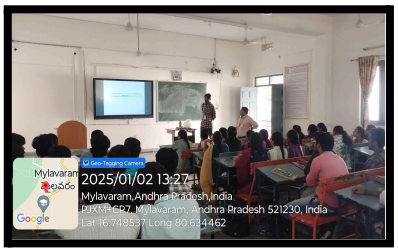
- Enhance interpersonal communication skills.
- Conceptual clarity on fundamentals of databases
- Improve the interest among the students.

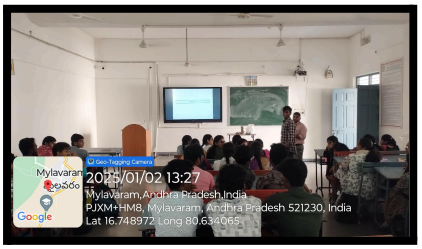
4. Details of participants in the event

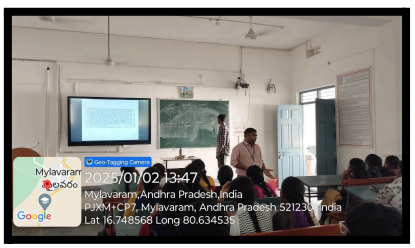
Champions Team	Mufasa Team	Turing Girls
23761A05M5	23761A0504	23761A05K9
2476FA0521	23761A05 M6	23761A03P9
2476FA0523	23761A05 M2	23761405 N6
23761A05K3	23761A05K2	23761405N7
23761A05N8	23761A05 Q4	23761A05 QI
23761A05P2	23761A05 K1	23761705 M3
23761A05M9	23761A05L3	23761A05 P3
23761A05K0	23761A05Lo	2476FA0520
2476FA0519	23761A05L6	23761405N2
23761A05K8	23761A05L9	23761905K6
23761A05K7	23761A05M7	23761905P8
23761A05Q2	23761A05 N3	23761A05N0
23761A05N5	23761A05O9	23761705K4
23761A05MO	23761A05N4	23761A05N0
23761A0502	23761A0505	2376140508
23761A0503	23761A05O0	23761705 PI
23761A05P6	23761A0507	23761405 K5
		2376140501

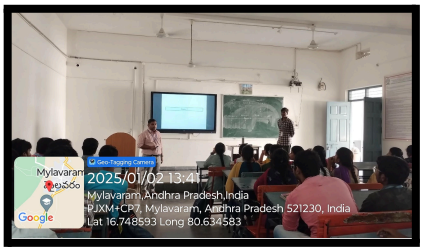
5. Activity Photos

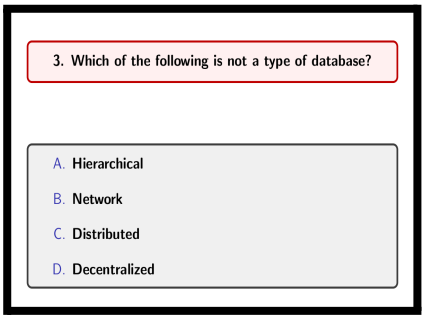


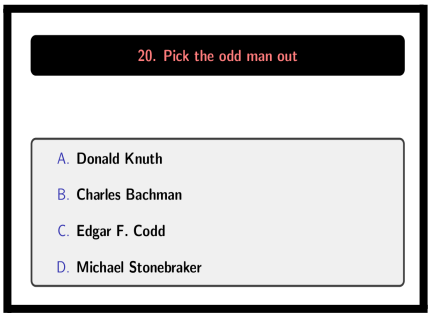


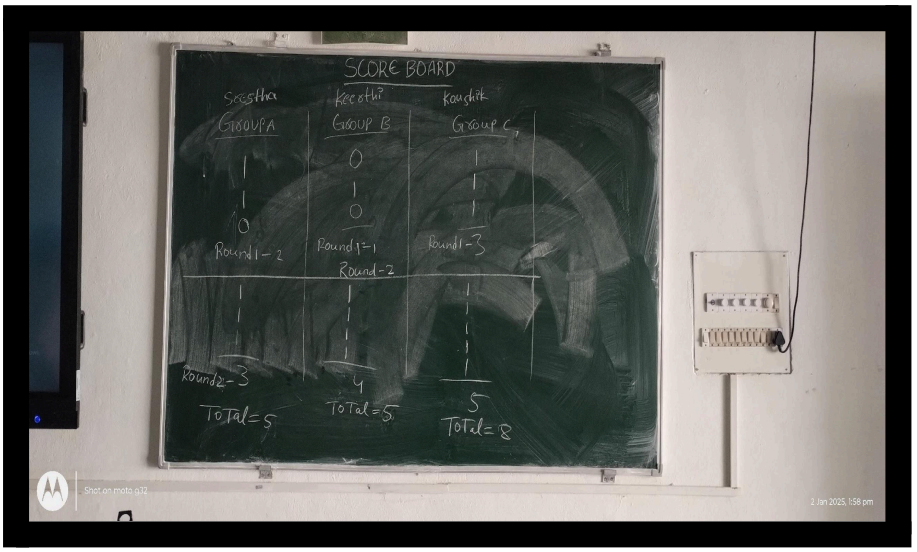












Course Instructor **Head of the Department**

(Dr. P. Bhagath) **(Dr. D. Veeraiah)**

LAKIREDDY BALIREDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Activity Based Learning

Course Details:

Course Name:	**DESIGN THINKING & INNOVATION LAB**
Course Code:	23ME57
Branch/Sem/Section:	CSE /IVSem/C
Academic Year:	2024-25
Faculty Name:	Mr.B.Siva Rama Krishna, Associateprofessor, CSE Mrs.P.Mary Kamala Kumari, Assistant Professor, CSE
Topic Selected:	Presentation of PPT- An Interactive Session
Date of Activity:	18-02-25

1. Selection of activity:

In my course,**DESIGN THINKING AND INNOVATION LAB,** to conduct an active learning work, I plan to conduct a "Design Thinking Workshop". Students will engage in hands-on activities such as brainstorming, user research, empathy mapping, ideation, prototyping and testing innovative solutions for real-word problems. The activity will enhance their creative thinking, problem-solving skills and user-centric design approach..

LIST OF OUTCOMES ASSOCIATED WITH ACTIVITY:

Understanding of Design Thinking Principles: Students will gain practical knowledge of the five stages of design thinking: empathize, define, ideate, prototype, and test.

Innovative Problem-Solving:Ability to apply creative thinking techniques to generate innovative solutions for complex challen

Prototyping and Testing: Ability to install and manage software applications, including drivers, utilities, and basic productivity tools.

User Researchand Empathy: Students will learn how to conduct interviews, create user personas, and analyze needs effectively.

.

2. OBJECTIVES OF ACTIVITY:

1. Creative Skill Development:

- To familiarize students with the design thinking process and user-centered problem solving.

2. User-centered Approach:

- To provide hands-on experience in understanding user needs and behaviors.
- To enable students to develop empathy and create meaningful solutions.

3. Problem-Solving and Innovation:

- To enhance the ability to identify to define problems and generate multiple innovation solutions.
- To encourage iterative design and validation through prototyping and feedback.

4. Practical Exposure to Design Tools

- To give students hands-on experience with tools like empathy maps, storyboarding, and wireframing.
- To introduce modern Design methodologies used in industry and research.

5. Enhancing Creativity and Innovation

- To inspire creativity problem-solving through brainstorming and lateral thinking exercises.
- To encourage innovative thinking in tackling complex real-world challenges.

6. Teamwork and Communication Skills

- To develop collaboration skills by working in groups on design challenges.
- To improve technical communication through documentation and presentations of innovative ideas.

7. Foundation for Advanced Learning

- To lay the groundwork for understanding user experience(UX) and human-computer interaction(HCI).
- To bridge the gap between theoretical knowledge and practical application in design and innovation.

3. Activity Photos:

Course Instructor

B. Siva Rama Krishna **Head of the Department**

P.M. Kamala Kumari **Dr. D. Veeraiah**

LAKIREDDY BALIREDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)
Accredited by NAAC with 'A' Grade & NBA (Under Tier-I),
AnISO21001:2018, 14001:2015, 50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B.REDDY NAGAR, MYLAVARAM,NTR DIST.,A.P.-521 230.
hodcse@lbrce.ac.in,cseoffice@lbrce.ac.in,Phone:08659-222933,Fax:08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Activity Based Learning

Course Details:

Course Name:	**DESIGN THINKING & INNOVATION LAB**
Course Code:	23ME57
Branch/Sem/Section:	CSE/ IV Sem /C
Academic Year:	2024-25
Faculty Name:	Mr B. Siva Rama Krishna, Associate Professor, CSE Mrs P. Mary Kamala Kumari , Assistant Professor, CSE
Topic Selected:	Presentation of Poster- An Interactive Session
Date of Activity:	07/01/25

1. Selection of activity:

In my course, **DESIGN THINKING AND INNOVATION LAB**, to conduct an active learning work, I plan to conduct a "Design Thinking Workshop". Students will engage in hands-on activities such as brainstorming, user research, empathy mapping, ideation, prototyping, and testing innovative solutions for real-world problems. The activity will enhance their creative thinking, problem-solving skills, and user-centric design approach.

LIST OF OUTCOMES ASSOCIATED WITH ACTIVITY:

Understanding of Design Thinking Principles: Students will gain practical knowledge of the five stages of design thinking: empathize, define, ideate, prototype, and test.

User Research and Empathy : Students will learn how to conduct interviews, create user personas, and analyze needs effectively.

Innovative Problem-Solving: Ability to apply creative thinking techniques to generate innovative solutions for complex challenges.

Prototyping and Testing: Familiarity with building low-fidelity and high-fidelity prototypes and testing them with users for feedback

2. OBJECTIVES OF ACTIVITY:

1. Creative Skill Development:

- To familiarize students with the design thinking process and user-centric problem solving.
- To teach the methods of ideation, prototyping, and iterative design.

2. User-Centered Approach:

- To provide hands-on experience in understanding user needs and behaviors.
- To enable students to develop empathy and create meaningful solutions.

3. Problem-Solving and Innovation:

- To enhance the ability to define problems and generate multiple innovative solutions.

4. Practical Exposure to Design Tools:

- To give students hands-on experience with tools like empathy maps, story boarding, and wire framing.

5. Enhancing Creativity and Innovation:

- To inspire creative problem-solving through brainstorming and lateral thinking exercises.
- To encourage innovative thinking in tackling complex real-world challenges.

6. Teamwork and Communication Skills:

- To develop collaboration skills by working in groups on design challenges.
- To improve technical communication through documentation and presentations of innovative ideas.

7. Foundation for Advanced Learning:

- To lay the groundwork for understanding user experience(UX) and human-computer interaction (HCL).
- To bridge the gap between theoretical knowledge and practical application in design and innovation.

3. Activity Photos:

Course Instructor **Head of the Department**

B. Siva Rama Krishna

P.M. Kamala Kumari **Dr.D.Veeraiah**

LAKIREDDYBALIREDDYCOLLEGEOFENGINEERING

(AUTONOMOUS)
Accredited by NAAC with 'A' Grade & NBA(Under Tier-I),
AnISO21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B.REDDYNAGAR, MYLAVARAM, NTRDIST.,A.P.-521 230.
hodcse@lbrce.ac.in,cseoffice@lbrce.ac.in,Phone:08659-222933,Fax:08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Activity Based Learning

Course Details:

Course Name:	**DESIGN THINKING & INNOVATION LAB**
Course Code:	23ME57
Branch/ Sem/Section:	CSE/ IV Sem/C
Academic Year:	2024-25
Faculty Name:	Mr. B.Siva Rama Krishna, Associate Professor, CSE Mrs. P. Mary Kamala Kumari, Assistant Professor, CSE
Topic Selected:	Presentation of Idea-Innovative Idea of Brain Stroming
Date of Activity:	31/12/2024

1. Selection of activity:

The Design Thinking & Innovation Lab (DTIL) integrates activity-based learning (ABL) as a core methodology to enhance creativity, problem-solving, and collaboration among participants. Activity learning in this context focuses on hands-on activities that promote understanding through active participation and application of design thinking principles.

LIST OF OUT COMES ASSOCIATED WITH ACTIVITY:

Understanding of Hardware Components: Students will gain practical knowledge of digital tools and technologies used in various industries, including data analysis, digital marketing, and content creation.

Operating System Installation: Students will learn how to collect, analyze, and interpret data using various software tools and methodologies.

Software Installation and Configuration: Ability to create and manage digital content, including graphics, videos, and written materials, using industry-standard software.

Networking Basics: Familiarity with basic web development concepts, including HTML, CSS, and JavaScript, as well as content management systems.

2.OBJECTIVESOFACTIVITY:

1. Technical Skill Development:

- To familiarize students with computer hardware components and their functionality.
- To teach the principles of data analysis and the use of software for data visualization and reporting.
- To introduce students to content creation tools and techniques for effective digital communication.

2. Networking Knowledge

- To enable students to understand concepts such as IP addressing, DNS, and network troubleshooting.
- To Enable students to understand the importance of digital literacy in today's Job market.

3. Problem-Solving and Troubleshooting

- To enhance the ability to identify, analyze, and resolve common hardware and software issues.
- Toencouragelogicalandsystematicapproachestotechnicalproblem-solving.

4. Practical Exposure to IT Tools

- To give students hands-on experience with tools like compilers, debuggers, and version control systems.
- To introduce modern IT tools and technologies used in the industry.

5. Enhancing Creativity and Innovation

- To inspire creativity by allowing students to design and build basic web pages or small programs.
- To encourage innovative thinking in solving technical challenges.

6. Teamwork and Communication Skills

- To develop collaboration skills by working in groups on network setups or system assembly tasks.
- To improve technical communication through documentation and presentations of completed tasks.

7. Foundation for Advanced Learning

- To lay the groundwork for understanding advanced topics in computer science and engineering.
- To bridge the gap between theoretical knowledge and real-world applications.

2. Activity Photos:

Course Instructor **Head of the Department**

B. Siva Rama Krishna **Dr. D.Veeraiah**

P.M. Kamala Kumari

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)
Accredited by NAAC with'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE &ENGINEERING

Course Details:

Course Name:	Data Structures
Course Code:	20CS02
Branch/Sem/Section:	CSE /II /F
Academic Year:	2024-25
Faculty Name:	Mr. R. Ashok
Topic Selected:	Sorting Techniques: Selection Sort
Date of Activity:	19-02-2025

1. Selection of activity:

To create an engaging and interactive learning experience, I have selected **"Brainstorming with a Role-Play Case Study"** for teaching **Selection Sort**. This approach encourages students to actively participate by taking on different roles to simulate the sorting process. As they act out each step, they will brainstorm and discuss their observations, which will be recorded on the board or chart paper. This collaborative method helps students deepen their understanding by building on each other's insights and reinforcing key concepts effectively.

2. List of outcomes associated with collaborative activity:

The selected activity enables students to grasp the concept of Selection Sort by actively identifying the smallest element and performing systematic swaps to achieve a sorted sequence. Through role-play, they gain hands-on experience in executing each step of the algorithm, strengthening their problem-solving and logical reasoning skills. Additionally, this approach helps students analyze and compare Selection Sort with other sorting techniques, enhancing their understanding of efficiency and real-world applications. By participating in brainstorming and discussions, they also develop teamwork and critical thinking abilities, fostering a deeper collaborative learning experience.

3. Objectives of Collaborative activity:

The main objectives of the collaborative activity are as follows. A learner will be able to:

- Develop critical thinking, communication, and collaboration skills through active participation.

- Gain different perspectives on problem-solving and generate new solutions by engaging in discussions.
- Enhance research, reasoning, and analytical skills by exploring the Selection Sort algorithm in depth.

4. Step-by-Step Procedure to Conduct the Activity:

I followed these steps to organize the **Brainstorming with Role-Play Case Study** activity in the class:

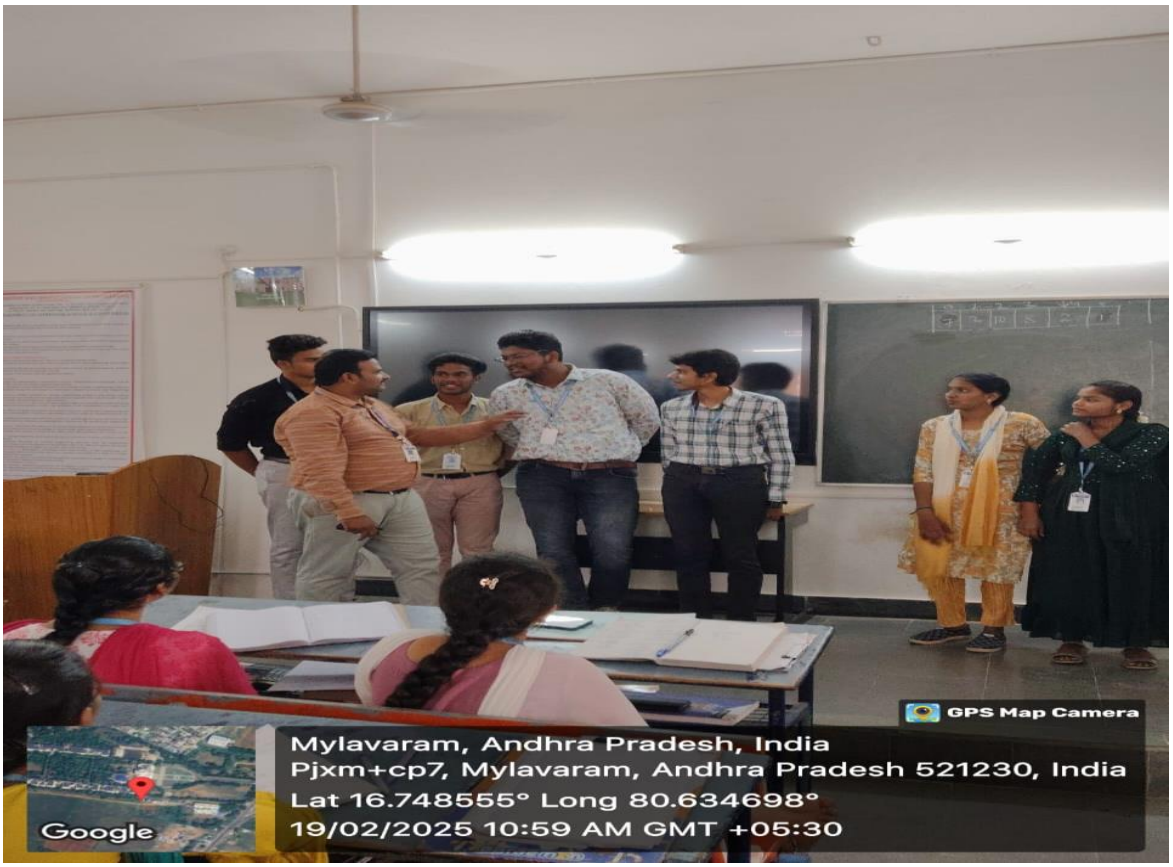
Step 1: Topic Assignment and Brainstorming

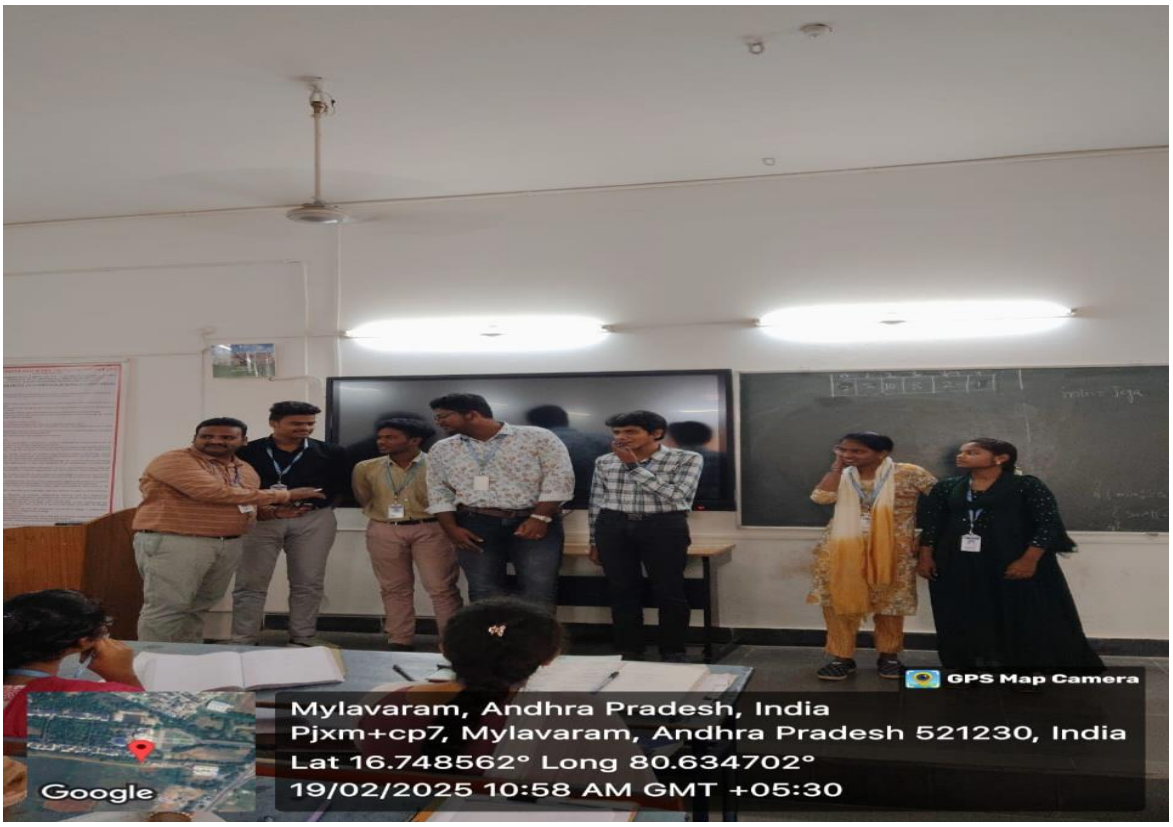
Students will be divided into small groups of five or six members, considering their academic abilities and diverse backgrounds. The goal of this grouping is to foster teamwork and collaborative problem-solving in understanding the Selection Sort algorithm.

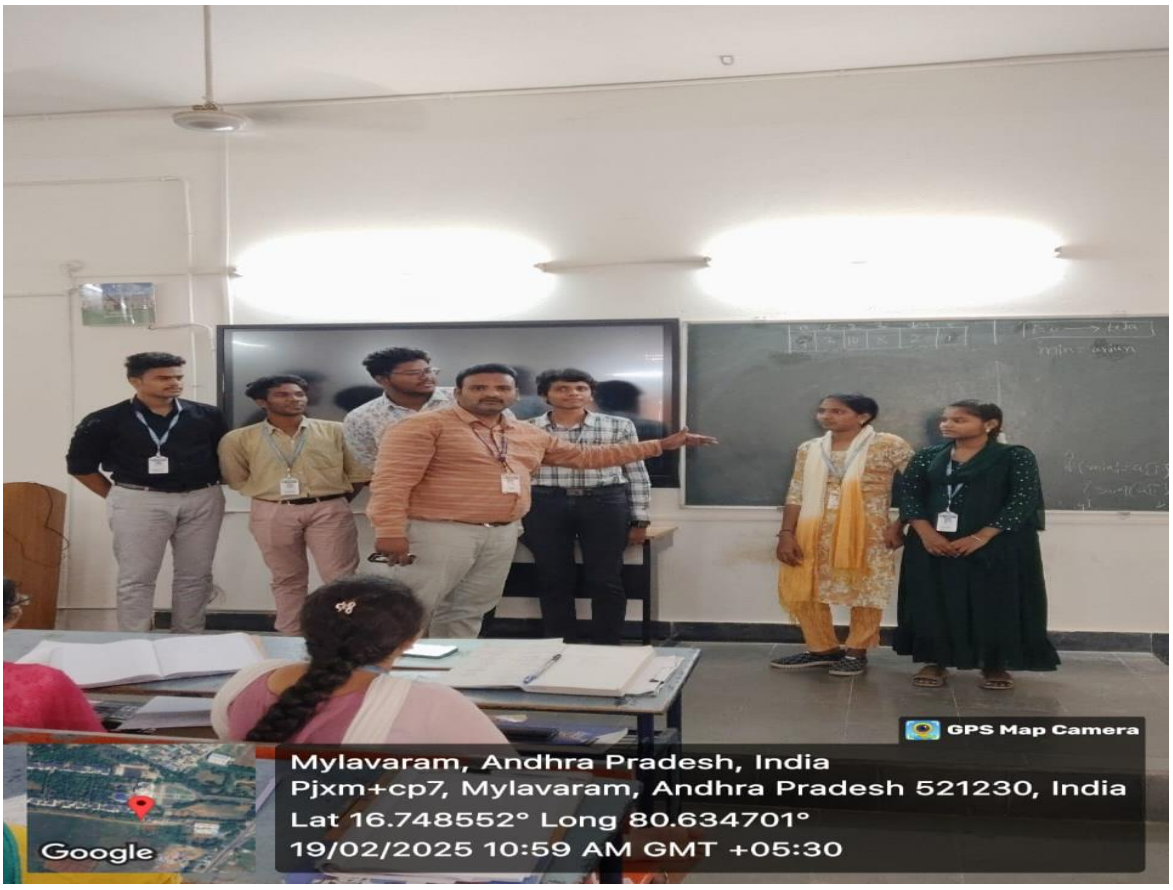
Step 2: Topic Assignment and Brainstorming

Each group will be assigned a specific aspect of Selection Sort, such as identifying the minimum element, swapping operations, or performance analysis. They will brainstorm on these concepts, discuss their observations, and then role-play the sorting process to visualize and reinforce their understanding.

5. Proofs of Activity







Course Instructor	Course Coordinator	Module Coordinator	Head of the Department
Mr R. Ashok	Dr. Y.Vijaya Bhaskar Reddy	Dr. Y.Vijaya Bhaskar Reddy	Dr. D. Veeraiah

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details:

Course Name:	Data Structures
Course Code:	20CS02
Branch/Sem/Section:	CSE /I/ D
Academic Year:	2024-25
Faculty Name:	Dr. S. Govindu
Topic Selected:	Stacks
Date of Activity:	20-03-2025

1. **Selection of activity:**

In my course, to conduct an active learning work, I plan to conduct **"Seminar".** This helps students in achieving objectives by improving individual presentation and analysis skills.

2. **List of outcomes associated with activity:**

In my course, the following outcomes are associated with the selected activity.

- Demonstrate the functionality of stacks.
- Explaining the concept of how to implement the stack using arrays.
- Demonstrate the concept of how to implement the stack using linked lists.
- Explaining the importance of stack concept in real time applications.

3. **Objectives of activity:**

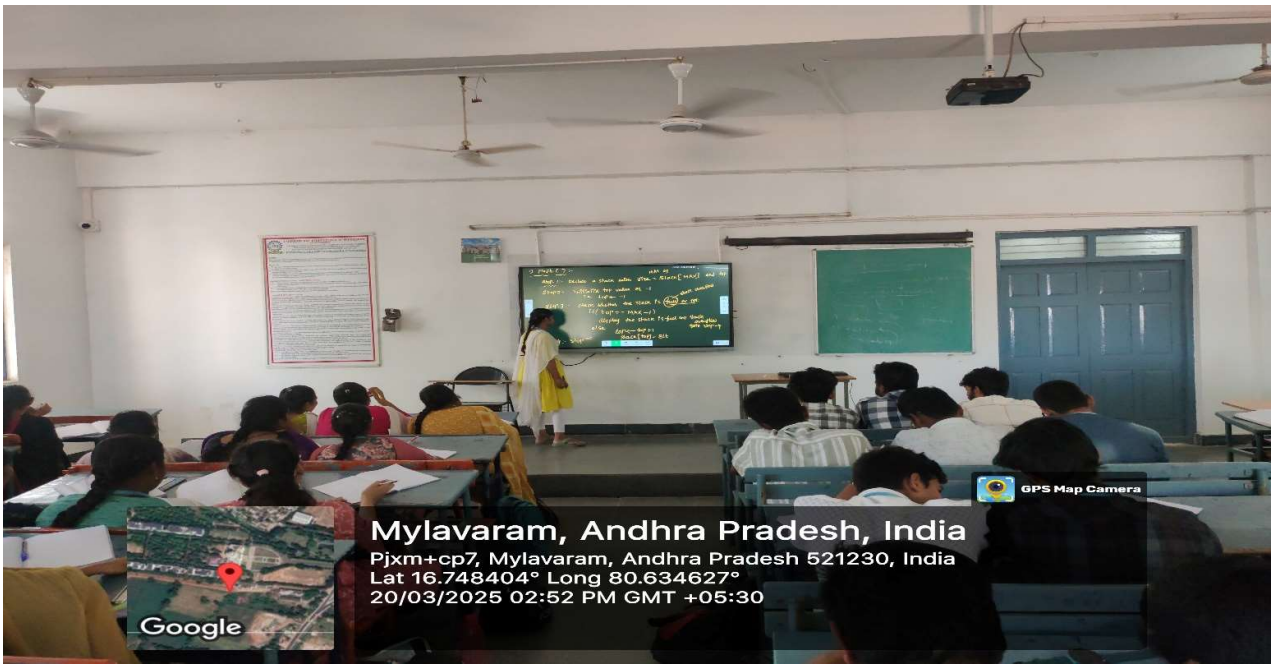
The main objectives of this activity are listed as follows. A learner able to:

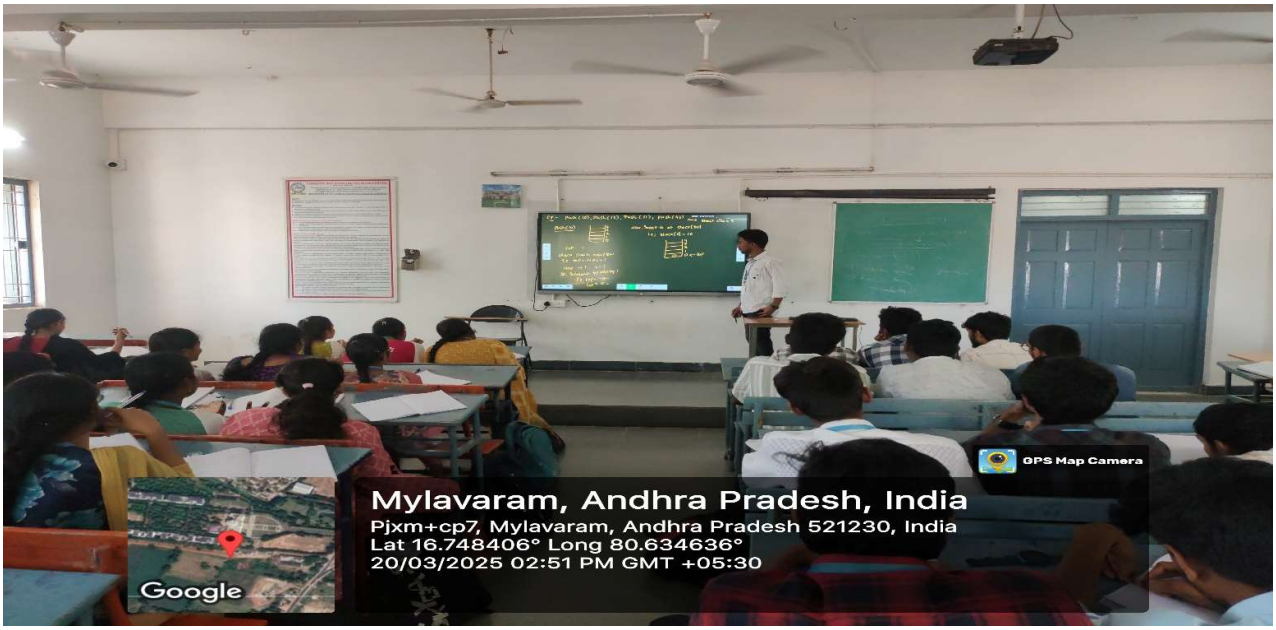
- Demonstrate the functionality of stacks.
- Explaining the concept of how to implement the stack using arrays.
- Demonstrate the concept of how to implement the stack using linked lists.
- Explaining the importance of stack concept in real time applications.

4. **Details of participants in Seminar**

S.no	Roll number	Name	Topic
1	24761A05L8	K Reshmitha	Functionality of Stack
2	24761A05N9	S Gayatri Dasaradh Kumar	Implementation of stack using arrays

5. **Activity Photos:**





S. Govindu
Course Instructor

Dr. D. Veeraiah
Head of the Department

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(An Autonomous Institution since 2010)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE &ENGINEERING

Course Details:

Course Name:	Data Structures
Course Code:	23CS02
Branch/Sem/Section:	CSE /II/A
Academic Year:	2024-25
Faculty Name:	Mr. A. S. R. C. Murthy
Topic Selected:	Removing duplicates from a Single Linked List, Finding Maximum & Minimum from a Single Linked List.
Date of Activity:	08-03-2025

1. Selection of activity:

In my course, to conduct anactive learning work, I plan to conduct **"Seminar on the above topics".** This helps students achieve objectives by improving conceptual clarity and analysis skills on the above concepts.

2. List of outcomes associated with activity:

In my course, the following outcomes are associated with the selected activity.

- Understand the role of linear and nonlinear data structures in organizing and accessing data**.**
- Implement abstract data type (ADT) and data structures for given application.

3. Objectives of activity

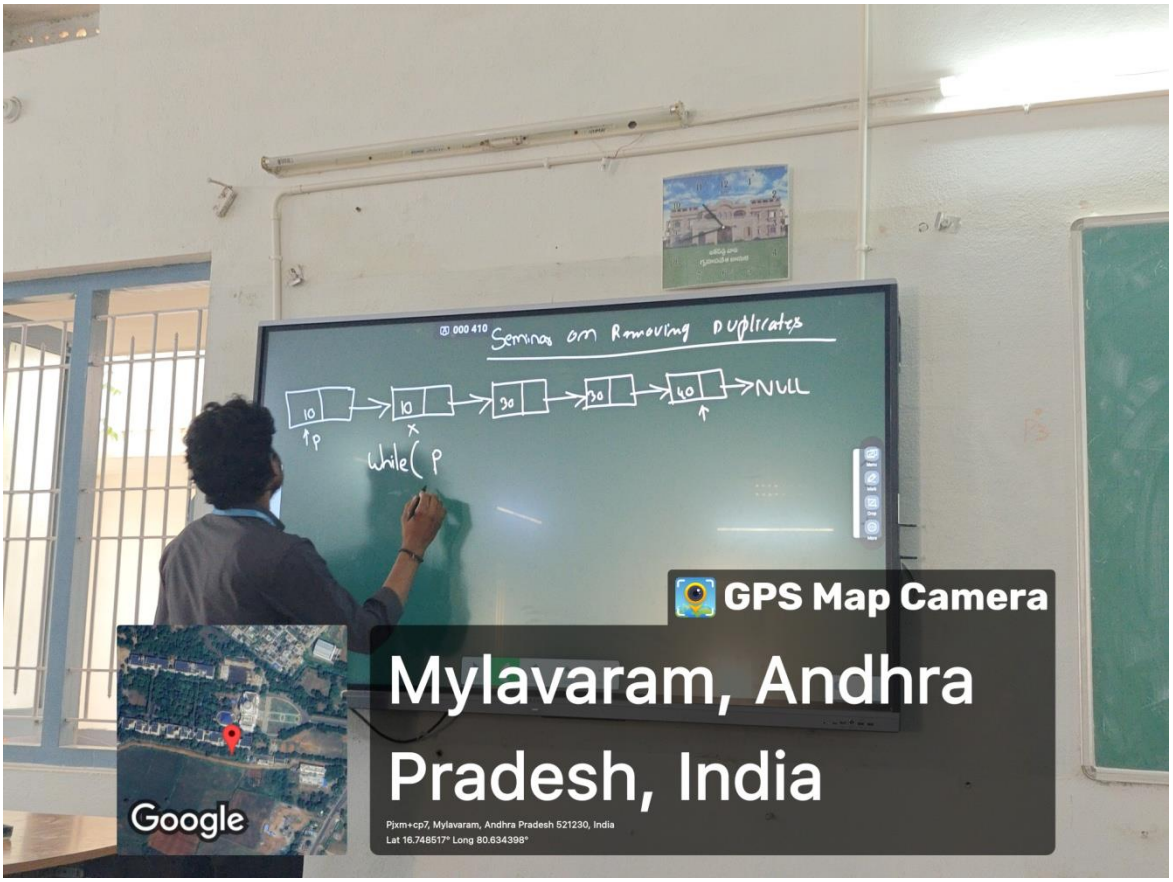
The main objectives of this activity are listed as follows. A learner able to:

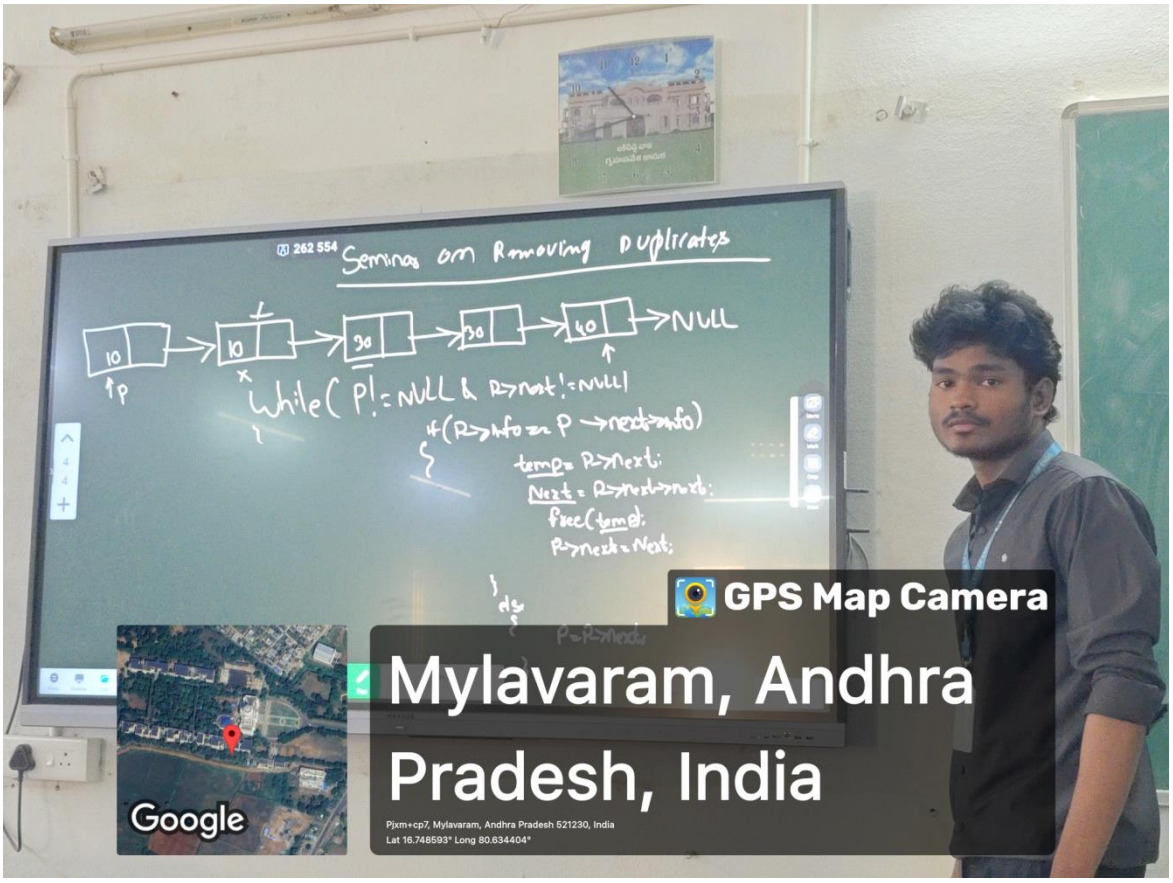
- Understanding Linear Data structures.
- Applying the concept of Single Linked List to solve the problems of finding out maximum, minimum and removing duplicates.

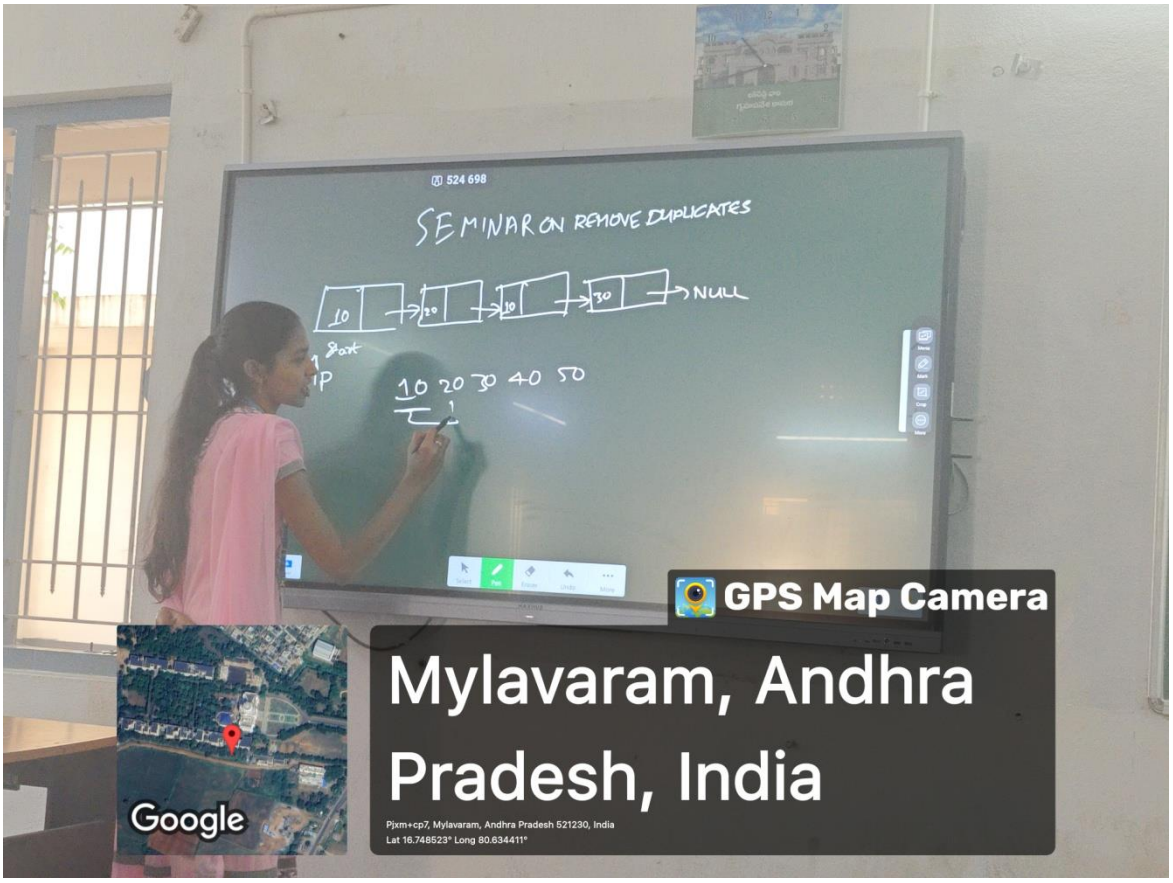
4. Details of participants in Seminar

S. No.	Regd. Num.	Name of the Student
1	24761A0512	DHANUMURI SRAVANI
2	24761A0530	MUCHINTALA CHANDRASU KARTHIKEYA
3	24761A0550	SAYYAD MAZAHAR MEHADI

1. **Activity Photos:**







Course Instructor
A S R C MURTHY

Head of the Department
Dr. D. Veeraiah

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details

Course Name:	Data Structures
Course Code:	23CS02
Branch/Sem/Section:	CSE /II /E
Academic Year:	2024-25
Faculty Name:	Dr. S. Nagarjuna Reddy
Activity Name:	**Crossword Puzzle**
Date of Activity:	23-01-202

1. **Selection of activity:**
   In my course, to conduct a collaborative work, I plan to conduct **"Crossword Puzzle".** The advantage of using this activity is students work collectively in achieving objectives by recollecting the topics in C programming language.

2. **Objectives:**
   - To revise and reinforce fundamental concepts of C programming such as variables, data types, operators, loops, functions, and arrays.
   - To enhance problem-solving skills and logical thinking in a fun and interactive way.
   - To promote collaboration and peer learning among students.

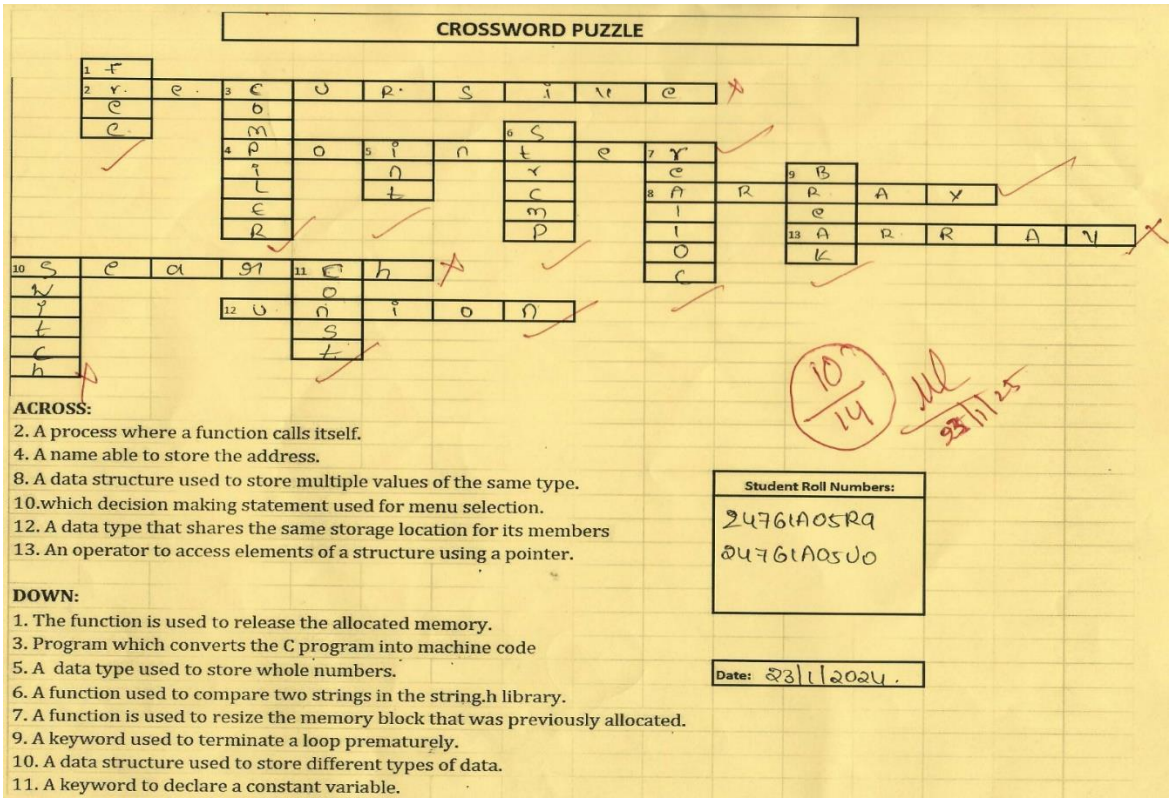
3. **Activity Details:**
   Activity Title: Crossword Puzzle on C Programming Basics
   Participants: 39 students
   Materials Required:
   - Printed copies of the crossword puzzle (one per group).
   - Clues for the crossword (definitions or descriptions).
4. **Structure of the Crossword Puzzle:**
   a. The crossword consisted of 14 clues, covering topics such as:
      i. Keywords
      ii. Operators
      iii. Control structures
      iv. Functions, arrays, structures and pointers

5. **Procedure:**

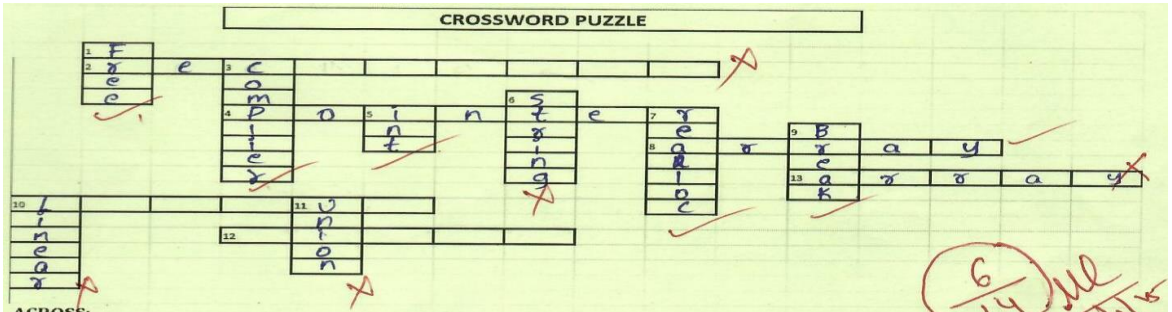
    1. **Introduction (05 minutes):**
        - Briefly explain the importance of strong C programming basics for learning data structures.
        - Divide the class into 19 groups of 2 students each.
        - Distribute the crossword puzzle and explain the rules.
    2. **Activity Execution (20 minutes):**
        - Each group works collaboratively to solve the crossword.
        - Students use their knowledge to find answers.
        - Facilitator walks around to provide hints or clarify doubts.
    3. **Discussion and Review (10 minutes):**
        - Groups share their answers, explaining how they arrived at them.
        - Key concepts related to data structures (e.g., how arrays and pointers relate to linked lists) are briefly highlighted to bridge the gap.

6. **Outcomes:**
    a. Students demonstrated a strong recall of basic C programming concepts.
    b. Collaborative problem-solving improved peer learning and engagement.

7. **Sample Answered Puzzles**



CROSSWORD PUZZLE



ACROSS:
2. A process where a function calls itself.
4. A name able to store the address.
8. A data structure used to store multiple values of the same type.
10. which decision making statement used for menu selection.
12. A data type that shares the same storage location for its members
13. An operator to access elements of a structure using a pointer.

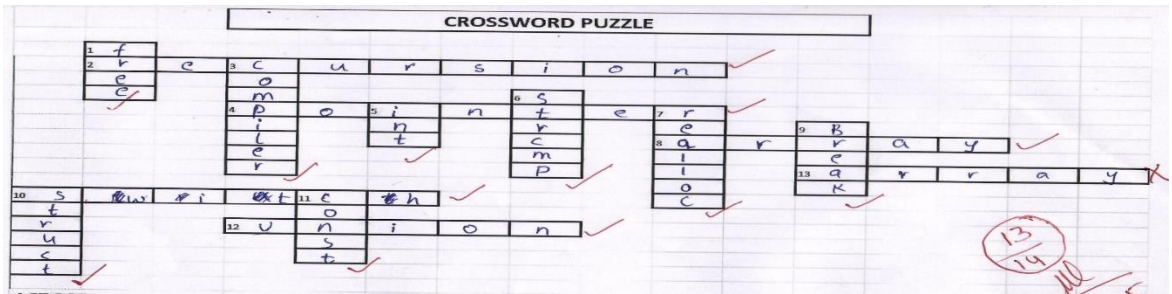
DOWN:
1. The function is used to release the allocated memory.
3. Program which converts the C program into machine code
5. A data type used to store whole numbers.
6. A function used to compare two strings in the string.h library.
7. A function is used to resize the memory block that was previously allocated.
9. A keyword used to terminate a loop prematurely.
10. A data structure used to store different types of data.
11. A keyword to declare a constant variable.

Student Roll Numbers:
24761A05To
24761A05W0

Date: 23/1/25

6/14 ML 23/1/25

CROSSWORD PUZZLE



ACROSS:
2. A process where a function calls itself.
4. A name able to store the address.
8. A data structure used to store multiple values of the same type.
10. which decision making statement used for menu selection.
12. A data type that shares the same storage location for its members
13. An operator to access elements of a structure using a pointer.

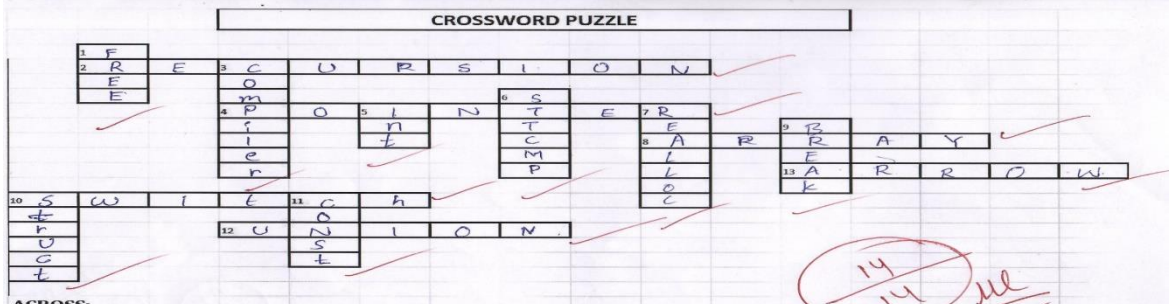
DOWN:
1. The function is used to release the allocated memory.
3. Program which converts the C program into machine code
5. A data type used to store whole numbers.
6. A function used to compare two strings in the string.h library.
7. A function is used to resize the memory block that was previously allocated.
9. A keyword used to terminate a loop prematurely.
10. A data structure used to store different types of data.
11. A keyword to declare a constant variable.

Student Roll Numbers:
24761A05T5
24761A05R4

Date: 23/1/25

13/14 ML 23/1/25

CROSSWORD PUZZLE



ACROSS:
2. A process where a function calls itself.
4. A name able to store the address.
8. A data structure used to store multiple values of the same type.
10. which decision making statement used for menu selection.
12. A data type that shares the same storage location for its members
13. An operator to access elements of a structure using a pointer.

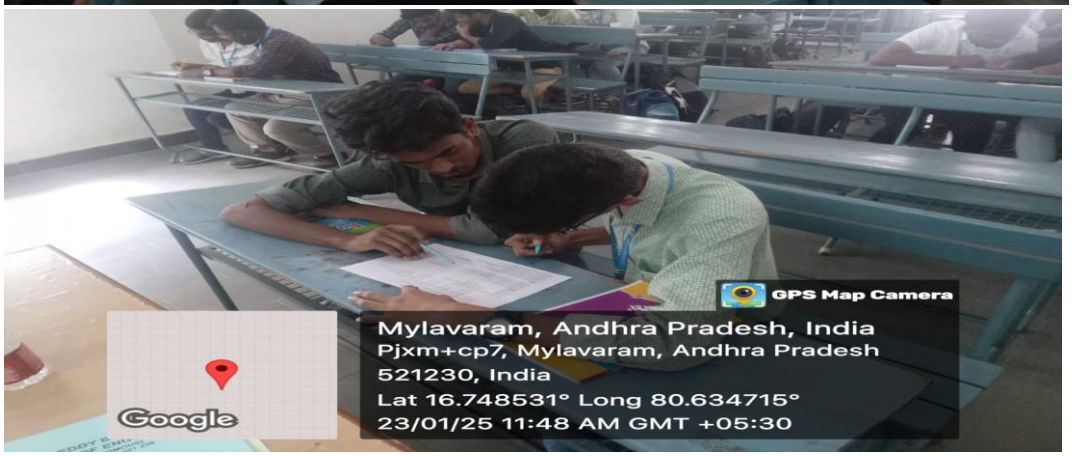
DOWN:
1. The function is used to release the allocated memory.
3. Program which converts the C program into machine code
5. A data type used to store whole numbers.
6. A function used to compare two strings in the string.h library.
7. A function is used to resize the memory block that was previously allocated.
9. A keyword used to terminate a loop prematurely.
10. A data structure used to store different types of data.
11. A keyword to declare a constant variable.

Student Roll Numbers:
24761A05U9
24761A05V1

Date: 23-01-2025

14/14 ML 23/1/25

8. Activity Photos:



Course Instructor **Head of the Department**

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details

Course Name:	Data Structures
Course Code:	23CS02
Branch/Sem/Section:	CSE /II /E
Academic Year:	2024-25
Faculty Name:	Dr. S. Nagarjuna Reddy
Activity Name:	**VirtuQuiz**
Date of Activity:	24-02-2025

1. **Selection of activity:**

   The online quiz event **VirtuQuiz** was conducted successfully on **24-02-2025 via Quizz.com** with the objective of testing and enhancing participants' knowledge of fundamental concepts in data structures, searching and sorting techniques, and linked lists.

2. **Objectives:**
   - To assess the understanding of fundamental data structures.
   - To evaluate knowledge of various searching and sorting algorithms.
   - To reinforce the concept of linked lists and their applications.
   - To provide an interactive and engaging learning experience.

3. **Quiz Format:**
   - Mode: Online (Quizz.com)
   - Duration: 20 Minutes
   - Number of Participants: 51
   - Structure: Multiple-choice questions (MCQs), True/False
   - Total Questions: 23
   - Scoring: Each question carried equal weightage.

4. Topics Covered:

- **Introduction to Data Structures:** Definition, Types, Importance, and Real-World Applications.
- **Searching Techniques:** Linear Search, Binary Search, and their complexities.
- **Sorting Techniques:** Bubble Sort, Selection Sort, Insertion Sort.
- **Linked List:** Singly Linked List

5. Participant Engagement & Performance:

- Total number of responses: 51
- Average score: 11.76 /23
- Highest score: 19/23
- Participants demonstrated strong understanding in Introduction to data structures and linked list.
- Areas requiring improvement included time complexities.

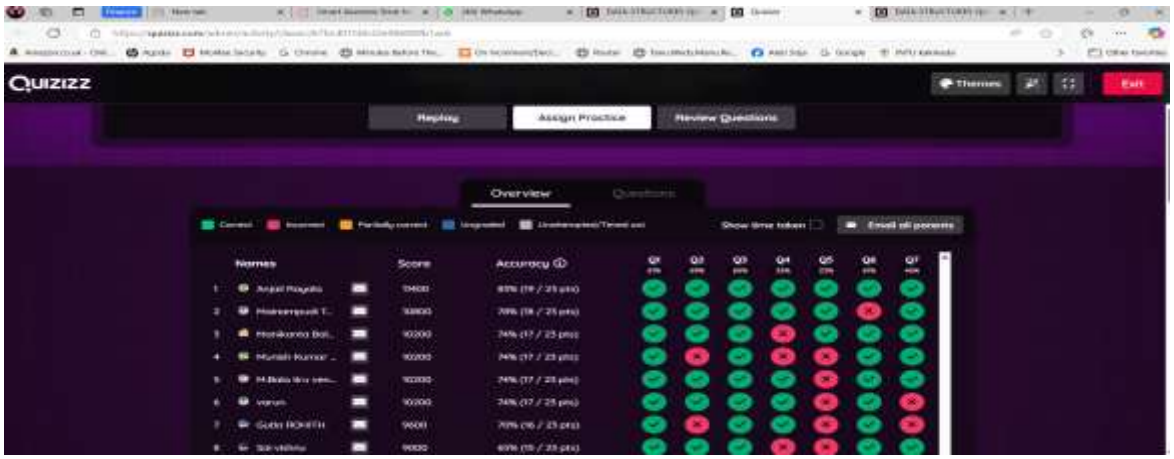
6. Feedback & Conclusion:

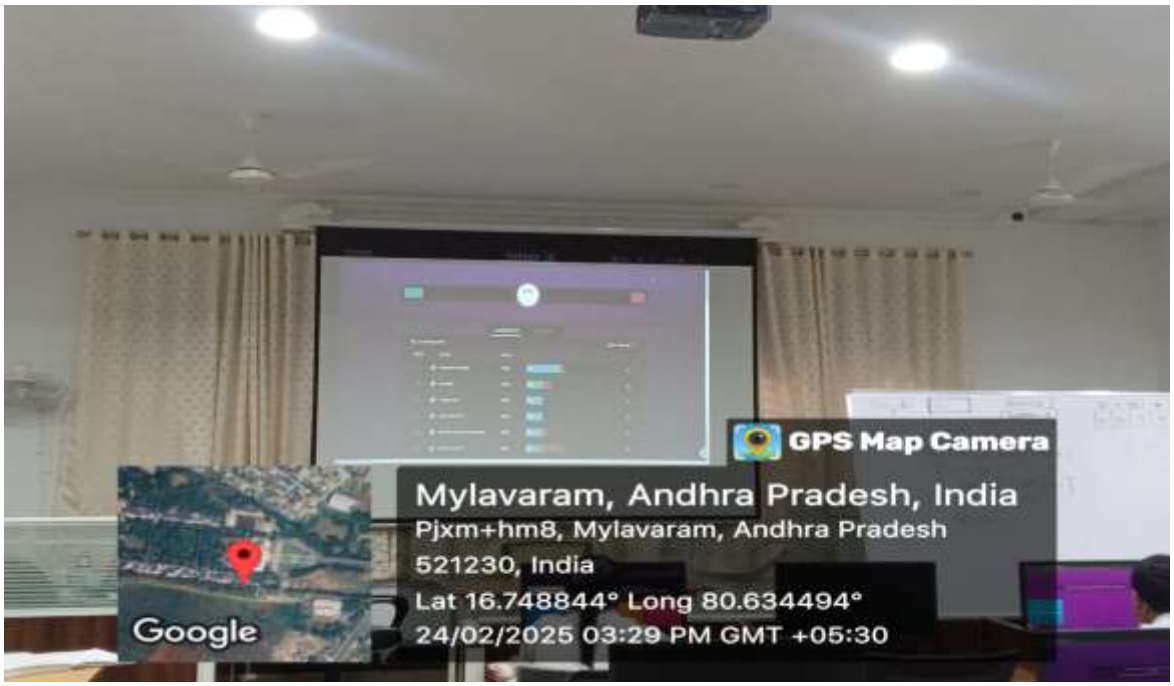
- Participants appreciated the interactive nature and well-structured format of the quiz.
- Some participants suggested incorporating **more problem-solving questions** and **live discussions** post-quiz for better understanding.
- The event successfully met its objectives, and it was recommended to be conducted periodically with all the topics in data structures.

7. Recommendations for Future Quizzes:

- Include explanatory solutions for each question.
- Conduct follow-up discussions to clarify doubts.
- Increase difficulty levels gradually for better learning outcomes.

Activity Photos:





Course Instructor **Head of the Department**

Quizizz

Quiz Name	Date	Hosted by
DATA STRUCTURES QUIZ-1	Mon Feb 24 2025 3:17 PM	Dr Reddy

Average Accuracy	Questions per Attempt	Number of Players
51%	23	51

This report displays results derived from the students' best attempts.

Players

Rank	Player Name	Avg. Time	Points	Accuracy	Correct
1	Anjali Rayala	43 secs	19	83%	19 / 23
2	Tarun M	33 secs	18	78%	18 / 23
3	Balasai. Modepalli	32 secs	17	74%	17 / 23
4	Balaji Balaji	12 secs	17	74%	17 / 23
5	Munish Kumar Golukonda	17 secs	17	74%	17 / 23
6	varun varun	41 secs	17	74%	17 / 23
7	Gutla ROHITH	27 secs	16	70%	16 / 23
8	K.SRAVANI	34 secs	15	65%	15 / 23
9	T973 Sajeena	42 secs	15	65%	15 / 23
10	Sai Phanithapu	30 secs	15	65%	15 / 23
11	bhavani	46 secs	15	65%	15 / 23
12	lakshman	41 secs	15	65%	15 / 23
13	Charan Charan	29 secs	14	61%	14 / 23
14	Dinesh Varma	36 secs	14	61%	14 / 23
15	Yasha Chowdary	33 secs	14	61%	14 / 23
16	Abhinash	30 secs	13	57%	13 / 23
17	Bhargavi Kodiganti	34 secs	13	57%	13 / 23
18	Chaitanya P	35 secs	13	57%	13 / 23
19	Gade Vijaykumarreddy	24 secs	13	57%	13 / 23
20	M.Poojitha	38 secs	13	57%	13 / 23
21	Sailaja Uppu	41 secs	13	57%	13 / 23
22	Jyothi Nandu	22 secs	13	57%	13 / 23
23	DEPURI JASMINE	36 secs	12	52%	12 / 23
24	Meghana Mettu	29 secs	12	52%	12 / 23
25	Nukala Dhanusree	36 secs	12	52%	12 / 23
26	Pradeepa Gangula	31 secs	12	52%	12 / 23
27	B.Mahesh	38 secs	11	48%	11 / 23
28	DEVALLA KEERTHANA	30 secs	11	48%	11 / 23
29	Lahari jatavath	31 secs	11	48%	11 / 23
30	The Husky	39 secs	11	48%	11 / 23

Rank	Player Name	Avg. Time	Points	Accuracy	Correct
31	Dr Reddy	31 secs	11	48%	11 / 23
32	Rishitha Malladi	41 secs	11	48%	11 / 23
33	Sudhamayi Gunupudi	38 secs	11	48%	11 / 23
34	mahathi	28 secs	11	48%	11 / 23
35	Phanindra Cherukumalli	25 secs	10	43%	10 / 23
36	polla narendra	23 secs	10	43%	10 / 23
37	AVULURI.SRI NAGALAKSHMI	39 secs	9	39%	9 / 23
38	rokati Raja	24 secs	9	39%	9 / 23
39	Jayasree Jayasree	34 secs	9	39%	9 / 23
40	Pavankumar Kalavagunta	25 secs	9	39%	9 / 23
41	HANNU SHAIK	12 secs	9	39%	9 / 23
42	SWAROOPA	39 secs	9	39%	9 / 23
43	k.anusha	35 secs	9	39%	9 / 23
44	Abhilash	21 secs	8	35%	8 / 23
45	B.chandu	38 secs	8	35%	8 / 23
46	Eswarsai	22 secs	8	35%	8 / 23
47	GANJI HEMALATHA	43 secs	8	35%	8 / 23
48	SHAIK MEERA	25 secs	8	35%	8 / 23
49	Venkata Venkamsetty	27 secs	7	30%	7 / 23
50	MOTRU BABU	44 secs	5	22%	5 / 23
51	VANYA YAMARTHI	0 secs	0	0%	0 / 23

Quizizz

Quiz : DATA STRUCTURES QUIZ-1

Date : Mon Feb 24 2025 3:19 PM

Student : Anjali Rayala (Anjali Rayala)

Accuracy

83%

Total Questions	✓ Correct	× Incorrect
23	19	4

No.	Question	Time	Points	Response
1	**What is value in the head -> next -> next below?**	42	0	✗ 88
2	How many times should **“temp =temp->next” be executed in the image to get the value of "Null" when the initial value of temp is temp=head**	33	0	✗ 3
3	What is the time complexity of binary search on a sorted array of size n?	5	1	✓ O(log n)
4	A binary search is to be performed on the list: 1 5 10 13 48 68 100 101 How many comparisons would it take to find number 101?	153	1	✓ 3-4
5	What is the output of following function in which start is pointing to the first node of the following linked list 1->2->3->4->5->6 ?	88	0	✗ 1 3 5 1 3 5
6	Let f(n) and g(n) be two non-negative functions,f(n)= θ (g(n)) if and only if.....	44	1	✓ c1*g(n)<=f(n)<=c2*g(n)
7	Lower bound running time complexity of an algorithm is also called as.....	31	1	✓ Best case time complexty

8	Find the time complexity for the following algorithm using step count method.
	Algorithm sum(a,n)
	{
	nsum=0;
	for(i=1;i<=n;i++)
	{
	nsum=nsum+a[i];
	}
	}
		93	0	✗ 2n+1 units

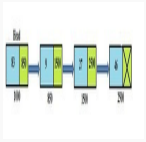
9	Which node’s data will be printed when **“temp =temp->next” is executed 3 times and the initial value of temp is temp=head**	70	1	✓ 46
10	Which type of sort algorithm is this?	25	1	✓ Insertion
11	What is the time complexity to adding an elements in front of the linked list?	43	1	✓ O(1)
12	.....Notation is used to represent strict upper bound running time complexity of an algotihm	20	1	✓ Big-oh

No.	Question	Time	Points	Response
13	Which of the following best defines a data structure?	18	1	✓ A way to organize and store data to facilitate access and modification
14	Which sorting algorithm repeatedly swaps adjacent elements if they are in the wrong order?	27	1	✓ Bubble Sort
15	**A variant of the linked list in which none of the node contains NULL pointer is?**	17	1	✓ Circular linked list
16	A linear search is to be performed on the list: 12 6 8 1 3 How many comparisons would it take to find number 1?	37	1	✓ 4
17	What is the time complexity to count the number of elements in the linked list?	60	1	✓ O(n)
18	**In the above image what will be printed when Head->next->data?**	23	1	✓ 9
19	Which type of lists or data sets are binary searching algorithms used for?	41	1	✓ Sorted lists or data sets
20	**A linked list contains a list pointer variable ____that stores the address of the first node of the list.**	16	1	✓ Head
21	Circular Linked List the Address part of last node holds the address of	75	1	✓ First Node
22	**What advantage does a linked list have over an array?**	11	1	✓ All of these are true.
23	Example of non linear data structure	10	1	✓ tree

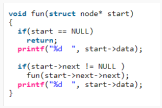
Appendix - Images

1. 

What is value in the head -> next -> next below?

2. 

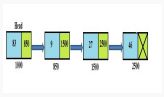
How many times should **“temp =temp->next” be executed in the image to get the value of "Null" when the initial value of temp is temp=head**

5. 

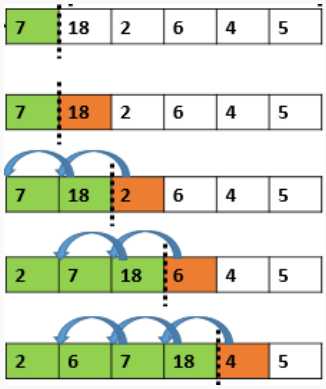
```
void fun(struct node* start)
{
  if(start == NULL)
    return;
  printf("%d ", start->data);

  if(start->next != NULL )
    fun(start->next->next);
  printf("%d ", start->data);
}
```

What is the output of following function in which start is pointing to the first node of the following linked list 1->2->3->4->5->6 ?

9. 

Which node’s data will be printed when **“temp =temp->next” is executed 3 times and the initial value of temp is temp=head**

10. 

Which type of sort algorithm is this?

18. 

In the above image what will be printed when Head->next->data?

Quizizz

Quiz Name	Date	Hosted by
DATA STRUCTURES QUIZ-1	Mon Feb 24 2025 3:17 PM	Dr Reddy

Average Accuracy	Total Questions	Number of Players	Participant Attempts
51%	23	51	51

This report displays results derived from the students' all attempts.

Questions

No.	Question	Time	Accuracy	Responses		
				Correct	*Incorrect*	*Unattempted*
1	**What is value in the head -> next -> next below?**	39 secs	10%	5	45	1
2	How many times should **“temp =temp->next” be executed in the image to get the value of "Null" when the initial value of temp is temp=head**	46 secs	16%	8	42	1
3	What is the time complexity of binary search on a sorted array of size n?	28 secs	22%	11	39	1
4	A binary search is to be performed on the list: 1 5 10 13 48 68 100 101 How many comparisons would it take to find number 101?	41 secs	33%	17	33	1
5	What is the output of following function in which start is pointing to the first node of the following linked list 1->2->3->4->5->6 ?	75 secs	33%	17	33	1
6	Let f(n) and g(n) be two non-negative functions,f(n)= θ (g(n)) if and only if.....	38 secs	35%	18	32	1
7	Lower bound running time complexity of an algorithm is also called as.....	23 secs	37%	19	31	1

8	Find the time complexity for the following algorithm using step count method.
	Algorithm sum(a,n)
	{
	nsum=0;
	for(i=1;i<=n;i++)
	{
	nsum=nsum+a[i];
	}
	}
		43 secs	37%	19	31	1

9	Which node’s data will be printed when **“temp =temp->next” is executed 3 times and the initial value of temp is temp=head**	34 secs	43%	22	28	1
10	Which type of sort algorithm is this?	27 secs	45%	23	27	1
11	What is the time complexity to adding an elements in front of the linked list?	22 secs	49%	25	25	1
12	.....Notation is used to represent strict upper bound	26 secs	59%	30	20	1

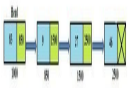
No.	Question	Time	Accuracy	Responses		
				Correct	*Incorrect*	*Unattempted*
	running time complexity of an algotihm					
13	Which of the following best defines a data structure?	27 secs	61%	31	19	1
14	Which sorting algorithm repeatedly swaps adjacent elements if they are in the wrong order?	32 secs	61%	31	19	1
15	**A variant of the linked list in which none of the node contains NULL pointer is?**	26 secs	63%	32	18	1
16	A linear search is to be performed on the list: 12 6 8 1 3 How many comparisons would it take to find number 1?	28 secs	65%	33	17	1
17	What is the time complexity to count the number of elements in the linked list?	25 secs	65%	33	17	1
18	**In the above image what will be printed when Head->next->data?**	30 secs	65%	33	17	1
19	Which type of lists or data sets are binary searching algorithms used for?	24 secs	69%	35	15	1
20	**A linked list contains a list pointer variable ____that stores the address of the first node of the list.**	35 secs	69%	35	15	1
21	Circular Linked List the Address part of last node holds the address of	27 secs	78%	40	10	1
22	**What advantage does a linked list have over an array?**	28 secs	80%	41	9	1
23	Example of non linear data structure	13 secs	82%	42	8	1

Appendix - Images

1.

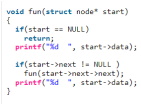
What is value in the head -> next -> next below?

2.



How many times should **"temp =temp->next" be executed in the image to get the value of "Null" when the initial value of temp is temp=head**

5.

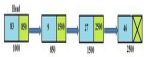


```
void fun(struct node* start)
{
  if(start == NULL)
    return;
  printf("%d  ", start->data);

  if(start->next != NULL )
    fun(start->next->next);
  printf("%d  ", start->data);
}
```

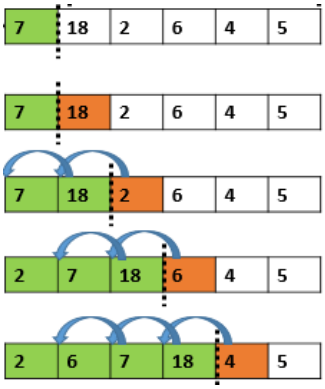
What is the output of following function in which start is pointing to the first node of the following linked list 1->2->3->4->5->6 ?

9.



Which node's data will be printed when **"temp =temp->next" is executed 3 times and the initial value of temp is temp=head**

10.



Which type of sort algorithm is this?

18.

In the above image what will be printed when Head->next->data?

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(An Autonomous Institution since 2010)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details:

Course Name:	Data Structures
Course Code:	23CS02
Branch/Sem/Section:	CSE /II /B
Academic Year:	2024-25
Faculty Name:	Dr. Y. Vijay Bhaskar Reddy
Topic Selected:	Sorting Techniques, Polynomial Representation
Date of Activity:	20-03-2025

1. Selection of activity:

In my course, to conduct an active learning work, I plan to conduct **"Role Play".** This helps students in achieving objectives by improving individual programming and communication skills.

2. List of outcomes associated with activity:

In my course, the following outcomes are associated with the selected activity.

- Explaining the concept of Sorting and Polynomial Representation.
- Elaborating the concept of Sorting and Polynomial Representation.
- Improve individual/teamwork, communication skills with ethical values.

3. Objectives of activity

The main objectives of this activity are listed as follows. A learner able to:

- Develop interpersonal communication skills.
- Know the conceptual clarity of Sorting and Polynomial Representation.
- Improve the presentation skills among the students.

4.Details of participants in Open Questioning

S.no	Roll number	Name
1.	24761A0566	AALLA ROHITHA
2.	24761A0567	ALLAM BHARATH SAI
3.	24761A0568	BADAKALA VINOD KUMAR
4.	24761A0569	BANAVATH VAMSI MOHAN
5.	24761A0570	BANDI VAMSI MADHAV
6.	24761A0571	BATTU JYOTHIRMAI
7.	24761A0572	BHAROTHU SIREESHA
8.	24761A0573	BILLA JOYCE
9.	24761A0574	BOBBALA TRIVIKRAM REDDY
10.	24761A0575	BOJEDLA HRUSHIKESH
11.	24761A0576	BOMMINA MANIKANTA
12.	24761A0577	BOWRISETTY ROHITH SAI
13.	24761A0578	BUDDE VENKATA SIVA LAKSHMI PRASANNA
14.	24761A0579	CHIGURUKOTA BHARGAV SAI
15.	24761A0580	ELASARAPU KUSHWANTH
16.	24761A0581	GANDHAM NIYATHI
17.	24761A0582	GANTA HARIKA LAKSHMI
18.	24761A0583	GOLLU SWATHI
19.	24761A0584	GOPIDESI PUJITHA
20.	24761A0585	GURRAM GEETHA SRIRTHI
21.	24761A0586	INJAMURI YASWANTH KUMAR
22.	24761A0587	JAJULA MAHESH
23.	24761A0588	JUJJAVARAPU SAILU
24.	24761A0589	KADALI SOWMYA
25.	24761A0590	KANCHI RAJESWARI
26.	24761A0591	KARETI VEERA MANIKANTA
27.	24761A0592	KASIVARAPU BHAVANI
28.	24761A0593	KATTA SRINIVAS
29.	24761A0594	KESAMSETTI AKHILA
30.	24761A0595	KOPURU MAMATHA
31.	24761A0596	KUCHIPUDI KARTHIK
32.	24761A0597	MALLADI PRAMOD
33.	24761A0598	MOHAMMED ABDUR RAHMAN
34.	24761A0599	MOHAMMED KAJAA MOYEEN PASHA
35.	24761A05A0	MORLA INDHU
36.	24761A05A1	MOTATI ANANTHA LAKSHMI
37.	24761A05A2	MUTHI NIKITH SRI RAJ
38.	24761A05A3	MUTYALA KOUSHIK

39.	24761A05A4	NACHHIREDDY JAGADEESH
40.	24761A05A5	NADAKUDURU VENUMADHAV
41.	24761A05A6	NERELLA VENKATA NAGA NANDINI
42.	24761A05A7	ONTIPULI SIRI CHANDANA
43.	24761A05A8	PADAM MAHALAKSHMI
44.	24761A05A9	PAKKURTHI NAGA SOWMYA
45.	24761A05B0	PALAGIRI THANUSHKA REDDY
46.	24761A05B1	PILAKA PHANI SURYA BHAVANI SANKAR REDDY
47.	24761A05B2	PONNAPUDI RAJESWARI
48.	24761A05B3	PONNATI MEENAKSHI
49.	24761A05B4	PULI TEJASRI
50.	24761A05B5	PURNA CHAND BAPATLA
51.	24761A05B6	RELLA ESWAR
52.	24761A05B7	SAMPATHI RUPA LAKSHMI
53.	24761A05B8	SANAGALA SIVA NAGA NIKESH REDDY
54.	24761A05B9	SHAIK ASIF
55.	24761A05C0	SHAIK ATHIKUR REHMAN
56.	24761A05C1	SHAIK SADARUNNISA
57.	24761A05C2	SHAIK SIDDHIK
58.	24761A05C3	SINGALLA NAVYA
59.	24761A05C4	SONTI DEEPA SREE
60.	24761A05C5	SUNKAVALLI JASWANTH CHOWDARY
61.	24761A05C6	TALLURI LIKHITHA
62.	24761A05C7	TAMARADA SWETHA
63.	24761A05C8	TATA CHANDRA SEKHAR
64.	24761A05C9	VEMULAKONDA VEERENDRA KUMAR
65.	24761A05D0	YADLA KIRAN KUMAR
66.	24761A05D1	YALAGANDULA SAI LALITHA

4.Activity Photos:

Course Instructor **Head of the Department**

(Dr. Y. Vijay Bhaskar Reddy) **(Dr. D. Veeraiah)**

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(An Autonomous Institution since 2010)
Accredited by NAAC with 'A' Grade & NBA (Under Tier - I),
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course Details:

Course Name:	Data Structures
Course Code:	23CS02
Branch/Sem/Section:	CSE /II /B
Academic Year:	2024-25
Faculty Name:	Dr. Y. Vijay Bhaskar Reddy
Topic Selected:	Stack Applications
Date of Activity:	29-03-2025

1. Selection of activity:

In my course, to conduct an active learning work, I plan to conduct **"Flipped Class Room".** This helps students in achieving objectives by improving individual programming and communication skills.

2. List of outcomes associated with activity:

In my course, the following outcomes are associated with the selected activity.

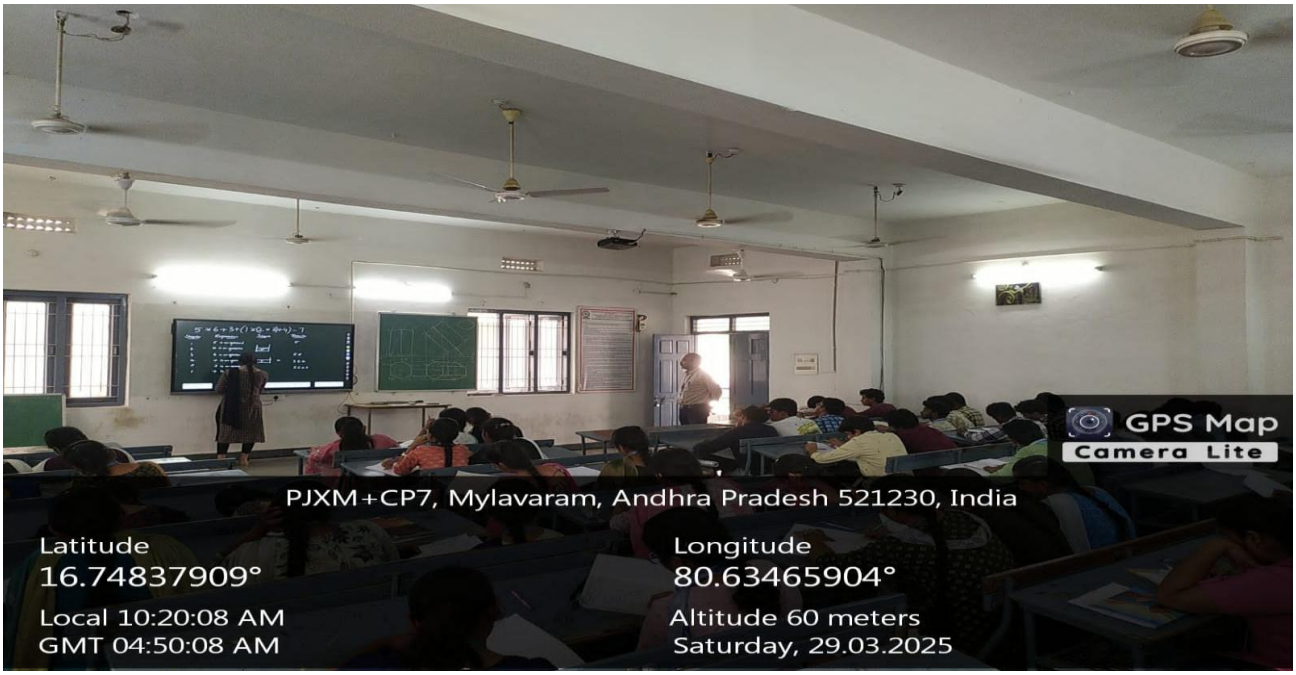
- Explaining the concept of infix to post fix conversion.
- Expression Evaluation.
- Improve individual/teamwork, communication skills with ethical values.

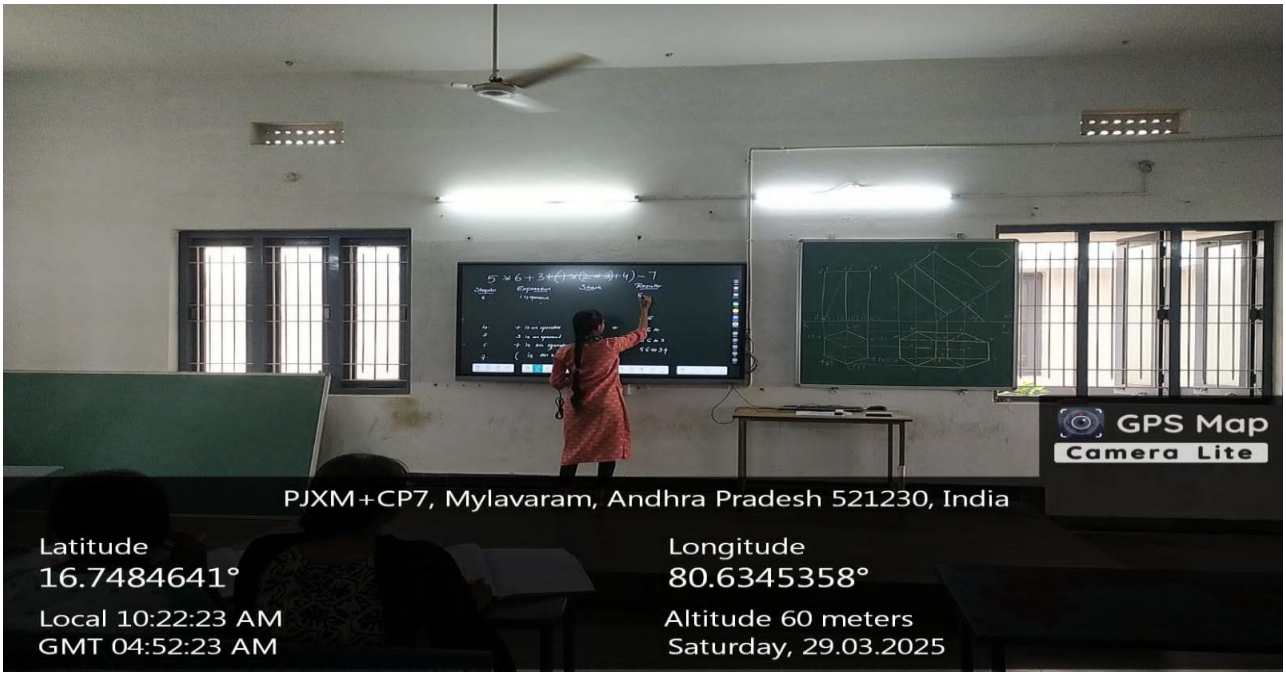
3. Objectives of activity

The main objectives of this activity are listed as follows. A learner able to:

- Develop interpersonal communication skills.
- Know the conceptual clarity of Expression Conversion and Evaluation .
- Improve the presentation skills among the students.

4. **Activity Photos:**





Course Instructor **Head of the Department**

(Dr. Y. Vijay Bhaskar Reddy) **(Dr. D. Veeraiah)**