LOVELY PROFESSIONAL UNIVERSITY

Academic Task-2

School of Computer Science and Engineering	Faculty of Technology and Sciences
Course Code: CSE 316	Course Title: Operating Systems
Term: 25261	Max. Marks:30

Instructions for Assignment Submission

1. This assignment is a compulsory CA component.

2. The assignment (project) is a group activity, but submission on UMS will be individual for each student.

3. The project submission mode is **Online** only. The student has to upload the report on or before the last date on UMS only. No submission via e-mail or pen-drive, or any media will be accepted.

4. Non-submission of project report on **UMS** till the last date will result in **ZERO** marks.

5. The student is supposed to code the project on his/her own. If it is discovered at any stage that the student has used unfair means, such as copying from peers or copying and pasting code directly taken from the internet, etc. **ZERO** marks will be awarded to the student.

6. The student who shares his assignment with other students (either in the same section or a different section) will also get **ZERO** marks.

Phase 1: Problem Assignment

Guidelines For Students:

Step 1: AI-Guided Development

AI Guidance:

- Students will submit the problem statement to the AI system.
- AI will analyze the problem and provide a **detailed explanation** of the project statement along with its breakdown.

The prompt that will be asked by a student to AI:

I have been assigned the following problem statement:

"Paste your Problem Statement Here."

Provide the following details to help me implement this project:

1. *Project Overview: Explain the project's goals, expected outcomes, and scope.*
2. *Module-Wise Breakdown: Divide the project into 3 separate modules (e.g., GUI, ML, data visualization), explaining their purposes and roles.*
3. *Functionalities: List key features for each module, with examples for clarity.*
4. *Technology Recommendations: Suggest programming languages, libraries, and tools to use.*
5. *Execution Plan: Provide a step-by-step implementation guide with tips for efficiency.*

Implementation Language: Any as per your project requirement

Step 2: Revision Tracking on GitHub

GitHub Workflow:

- Students will:
  - Create a repository for the project.
  - Maintain at least 7 revisions and push changes regularly with clear commit messages.
  - Use branches for feature implementation and merge them into the main branch after testing.

Step 3: Report Format

1. Project Overview
2. Module-Wise Breakdown
3. Functionalities
4. Technology Used
   - Programming Languages:
   - Libraries and Tools:
   - Other Tools: [e.g., GitHub for version control]
5. Flow Diagram
6. Revision Tracking on GitHub
   - Repository Name: [Insert Repository Name]
   - GitHub Link: [Insert Link]
7. Conclusion and Future Scope

8. References

Appendix

A. AI-Generated Project Elaboration/Breakdown Report

[Paste the AI-generated breakdown of the project in detail]

B. Problem Statement: [Paste Problem Statement]

C. Solution/Code:

[Paste complete code of entire project here]

Phase 2: Project Evaluation (30 marks)

The entire evaluation has been divided into 2 steps:

Step 1: AI Evaluation (15 marks)

The faculty members will use AI to evaluate the project submitted by the student. This AI evaluation will be out of 15 marks.

Step 2: Presentation and Viva (15 marks)

The faculty members will take the presentation and viva of the students in their respective classes and will evaluate the students as per the shared rubrics.

Rubric for Presentation and Viva

Criterion	**Details**	**Marks**
Understanding of Project and Question response	Depth of knowledge about the problem statement, implementation, and challenges.	**10**
- Excellent	Demonstrates thorough understanding with clear and concise answers.	7
- Good	Good understanding but some minor gaps.	5
- Needs Improvement	Limited understanding and vague answers.	3
Problem-Solving Approach	Innovative solutions and effective handling of challenges.	**3**
- Excellent	Showcases innovation and robust problem-solving skills.	3

Criterion	Details	Marks
- Good	Reasonable problem-solving with minor shortcomings.	2
- Needs Improvement	Basic or ineffective problem-solving approach.	1
Communication Skills	Clarity and confidence in explaining the project.	2
- Excellent	Articulates ideas effectively with high confidence.	**2**
- Good	Reasonably clear explanations with some hesitation.	1
- Needs Improvement	Difficulty in articulating thoughts or lack of confidence.	0