Lovely Professional University

FM=100 PROJECT II PM=50

Course:Python and Full Stack

Deadline: 9th Feb 2026 (11:59pm)

Project III : Instructions and Evaluation Scheme

Real-Time Ivy League Opportunity Intelligence & Student Competency Network Using python framework

Students often miss high-quality opportunities such as workshops, hackathons, research internships, scholarships, and conferences from top universities due to scattered information sources and lack of personalization.

This project proposes an AI-driven real-time system that continuously monitors Ivy League university platforms, extracts updated opportunities, categorizes them based on student domain interests (AI, Law, ECE, etc.), and enables automatic application submission.

Additionally, the system introduces a social academic community where students showcase achievements, interact, and are ranked using an intelligent scoring algorithm called **InCoScore (Intelligent Competency Score)**.

PROBLEM STATEMENT

1. No centralized real-time platform for Ivy League opportunities
2. Manual searching consumes time
3. Students receive irrelevant information
4. No smart ranking of student competency
5. No auto-application assistance
6. Limited academic networking platforms

OBJECTIVES

- Build real-time opportunity monitoring system
- Classify events by student domain using AI
- Provide automated application system
- Develop student academic social network

- Design intelligent performance ranking (InCoScore)
- Recommend students for suitable opportunities

PROPOSED SYSTEM MODULES

1️⃣ Real-Time Opportunity Extraction Module

Functions:

- Monitor Ivy League university websites
- Detect updates automatically
- Store new opportunities

Techniques:

- Web scraping
- API monitoring
- Change detection

2️⃣ AI-Based Domain Classification Module

Functions:

- Analyze opportunity text
- Categorize into domains like:
    - Artificial Intelligence
    - Law
    - Biomedical
    - Engineering

Techniques:

- NLP/AI
- Machine Learning classifiers

3️⃣ Student Profile & Personalization Module

Stores:

- Skills
- Interests
- Academic background
- Resume

Outcome:

- Personalized opportunity feed

4️⃣ Auto-Application System

Features:

- Form detection
- Resume upload
- Auto fill
- Submission confirmation

5️⃣ Academic Community Platform

Includes:

- Posts
- Comments
- Likes
- Groups by domain
- Chat system

6️⃣ InCoScore Ranking Engine

Parameters:

- Hackathons
- Internships
- Research papers
- Coding performance
- Competition results

Output:

- Student leaderboard
- Smart shortlisting

EXPECTED OUTCOMES

✔ Real-time opportunity dashboard
✔ Domain-specific notifications
✔ Automated applications
✔ Academic social network
✔ Intelligent ranking system
✔ Improved student participation

Students are free to choose:

- Any Python framework: **Django, Flask, FastAPI, or others**
- Any platform: **Web system, Mobile App, or Hybrid App**
- Optional integration of **Artificial Intelligence (AI)** for automation and smart features

Project Timeline

- You are advised to **start immediately** to ensure timely and quality completion.
- Avoid last-minute work. Consistent daily effort is essential.

⚠ **Important Note:**
Do not completely rely on AI tools. This project requires **deep thinking, practice, and independent problem-solving**. Overdependence on tools will limit your learning and may lead to poor outcomes.

Project Submission Requirements

Each project must be completed **independently** and include the following:

1. **GitHub Repository**
    - Push the complete source code
    - Maintain a clean and clear project structure
    - Include a well-written README.md explaining:
        - Project purpose
        - How the code works
        - How to run the program

2. **Technical Blog (Medium.com)**
   Your blog must clearly explain:
   - Project overview and objectives
   - Basic theory and Python concepts used
   - Motivation and real-world relevance
   - Step-by-step explanation of the code (line-by-line)
3. **Project Explanation Video**
   - Record using **OBS Studio only**
   - The video should include:
     - Explanation of the theoretical background
     - Code walkthrough
     - Challenges faced and how you resolved them

Important Instructions

- OBS Studio is **mandatory** for video recording
- Code quality, readability, and structure will be strictly evaluated
- Your explanation must clearly reflect **your own understanding**

Evaluation Scheme

Marks	Evaluation Criteria
lim (x → 0) (e^(50x) − 1)	Complete project implementation with code pushed to GitHub
lim (x → 0) (e^(20x) − 1)	Detailed Medium blog with clear explanation and neat code
lim (x → 0) (e^(15x) − 1)	Video recording with in-depth project explanation
lim (x → 0) (e^(15x) − 1)	Theory viva and practical viva

Academic Integrity Policy

⚠ **Strict Warning**

Any project, code, blog, or video found to be:

- Copied from other students
- Taken from online sources without proper attribution

will result in **strict penalties**, including:

- **Zero marks**

This major project is designed to enhance your **practical skills, conceptual clarity, and independent thinking**. I strongly encourage you to work honestly and sincerely.

If you face any difficulty or require guidance at any stage, please feel free to contact me. I will be happy to assist you.

Wishing you all the very best.
Happy Learning!