

## TRACK 2 (MCA) - Problem Statement: "PlacementPro" – The Integrated Campus Career Suite

**Target Platform:** Web Application (Priority) + Mobile App (Optional Bonus)

### The Core Concept

The goal is to build a **Role-Based Web Application** that acts as the central brain for the college's placement activities. It replaces Excel sheets with a dynamic database and replaces notice boards with real-time dashboards.

### The Application Architecture (How it works)

This application will have three distinct interfaces (Views) tailored to the specific user:

#### 1. The Placement Officer (TPO) Admin Dashboard

- **Function:** Control Center.
- **Key Feature - "The Criteria Engine":**
  - The TPO creates a "Drive" (e.g., TCS Digital).
  - **Input:** They enter constraints: *Minimum CGPA: 7.0, Backlogs: 0, Branches: CS/MCA Only*.
  - **Logic:** The app queries the student database and instantly displays a list: "*142 Students Eligible*."
  - **Action:** One-click "Notify All Eligible" button sends an email/SMS/App Notification to only those 142 students.
- **Interview Scheduler:** A drag-and-drop calendar to assign interview slots to students, preventing overlaps.

#### 2. The Student Application (Web/Mobile)

- **Function:** Career Profile & Action.
- **Key Feature - "Resume Wizard":**
  - A form-based input (Project details, Skills, Marks).
  - **Output:** The app generates a standardized, college-branded PDF resume instantly.
- **Live Feed:** A personalized feed showing *only* the companies they are eligible for. No clutter.
- **Application Tracker:** Status indicators for their applications (e.g., *Applied, Aptitude, Cleared, Interview Scheduled, Selected*).

### **3. The Alumni "Connect" Portal**

- **Function:** Networking & Give-back.
- **Key Feature - "Job Referral Board":**
  - Alumni can post job openings from their current companies directly visible to juniors.
- **Mentorship Slots:** Alumni can set "Available Hours" for mock interviews or guidance, which students can book.

### **4. The "Market Intelligence" & Analytics Dashboard**

- **Function:** Data-Driven Insights for Students & TPOs.
- **Key Feature - "Skill Gap Analysis":**
  - **Concept:** The system compares the student's current profile against real market data.
  - **Logic:** "You are targeting 'Data Analyst' roles. 80% of placed students had 'PowerBI' in their skills, but you do not. **Action:** Recommended learning path."

### **5. "PlacementBot" – The 24/7 Virtual Career Assistant**

- **Function:** Instant Query Resolution & Mock Prep.
- **Why it's needed:** The Placement Office (TPO) is bombarded with the same questions repeatedly ("*What is the cutoff?*", "*When is the interview?*", "*Is the venue changed?*"). The bot automates these replies.

#### **NOTE: Ideas to Gain Extra Points (Bonus Features)**

*Students are encouraged to implement advanced features to distinguish their project and gain bonus points from the judges.*