Project Charter: Student Graduation Year and Placement Prediction Project

1 Project Title

Student Graduation Year and Placement Prediction Project

2 Background

Cloud Counselage is dedicated to optimizing available resources, providing timely support, and ensuring excellent academic and career outcomes for students.

3 Problem Statement

3.1 Context

The challenge arises from the lack of clarity regarding when students will graduate and whether they will secure placements. This is attributed to inadequate academic and career advice, delayed access to graduation status information, and insufficient job market preparation.

3.2 Relevance

The issue directly impacts:

- Student Academic Performance.
- Employability.
- Career Development.

Addressing this challenge is crucial to enhancing student outcomes.

4 Objective

The primary objective is to develop predictive machine learning models that:

1. Accurately estimate students' expected graduation years, using historical data and essential features such as college details.
2. Predict students' placement outcomes, utilizing data on academic records, course progress, extracurricular activities, and past placement results.

The models will enable Cloud Counselage to provide timely support to students and enhance their academic and career outcomes.

5 Deliverables

The following deliverables will be submitted:

- App Demo Video in .mp4 Format (Not Exceeding 5 Minutes).
- Code (Zip File GitHub Link).
- Project Documentation, including:
  - Project Charter.
  - Software Requirements Specification.
  - Work Breakdown Structure.
  - Project Schedule.
  - RAID Logs (Risks, Assumptions, Issues, Dependencies).
  - System Design Specification.
  - Test Plan.
  - Development Log.
  - Traceability Matrix.
  - Lessons Learned Log.
  - Installation Operations Guide.
  - Project Report.

6 Instructions

To ensure project success, adhere to the following instructions:

- Use Jupyter Notebook, Google Colab, or any preferred IDE.
- Implement the project using the Python programming language.
- Achieve a high accuracy rate for the machine learning models.
- Store final prediction results in Excel files.
- Maintain separate Excel files and Python files for graduation year and placement prediction models.

7 Constraints

- Use of Python programming language.
- High accuracy rate for ML models.
- Store final prediction results in Excel files.
- Maintain separate Excel files and Python files for graduation year and placement prediction models.

8 Project Team

- Software Developer: Putti Chaitanya Phaniswar

9 Project StakeHolders and Customers

- **Process Owner** Harshada Topale
- **Key Stakeholders** Harshada Topale
- **End Customers** Cloud Counselage Pvt. Ltd.

10 Support Resources

Specify the resources and tools needed for the project, such as data sources, development environments, and hardware.

11 Risks

- Risk 1: Data quality issues.
- Risk 2: Delays in data availability.
- Risk 3: Technical challenges.

12 Assumptions

- Availability of historical student data.
- Cooperation of relevant departments.

13 Milestones

1. Milestone 1: Requirement Gathering- August 17, 2023
2. Milestone 2: Planning - August 22, 2023
3. Milestone 3: Design - August 29, 2023
4. Milestone 4: Development - September 5, 2023
5. Milestone 5: Testing - September 10, 2024
6. Milestone 6: Deployment - September 15, 2024