Statement of Work (SOW)

Project Title: A visualization tool for analysing student scores
Date: 7/2/2025
Prepared By: Mahindra University

1. Introduction

This Statement of Work (SOW) outlines the objectives, scope, deliverables, and responsibilities for the development of a Student Score Visualization Tool. The project aims to automate student performance analysis through data visualization, making it easier for educators and students to understand trends and insights. The tool will enhance efficiency, reduce manual analysis efforts, and improve decision-making.

2. Scope of Work

The project involves developing a web-based application that enables students to analyze their own performance through interactive visualizations. The system will integrate a database to store and manage student scores, ensuring that each student can only access their personal performance data. Additionally, students will be able to view batch-level statistics, such as average scores and overall performance trends, without accessing individual scores of other students. Educators will have access to detailed insights, including individual student performance and class-wide analytics.

Objectives and Key Activities:

- Develop an interactive data visualization platform for individual student scores.
- Implement secure database to manage student performance records with access control.
- Implement course management functionality for administrators to add courses, track statistics, and assign educators .
- Enable educators to access detailed performance analytics for class evaluation.
- Design a user-friendly interface for students and faculty.

3. Deliverables

- UI/UX Design: Designing user interface prototypes (February 20, 2025)
- Feature Development: Implement data visualization techniques (March 15, 2025)

- Database System: Creating a backend database for managing student scores (March 30, 2025)
- Admin Course Management: Creating functionality for administrators to manage courses, view statistics, and assign educators (March 30, 2025)
- Testing and Debugging: Unit testing, Integration testing; Identifying, analyzing, and fixing any software bugs (April 15, 2025)
- ~~Final Submission: Student Score Visualization Tool (May 1, 2025)~~

4. Timeline and Milestones

Milestone	Description	Due Date
Project Kickoff	Initial project meeting	February 7, 2025
Phase 1 Completion	Creating UI/UX prototype	February 20, 2025
Phase 2 Completion	Implementing data visualization	March 15, 2025
Phase 3 Completion	Backend integration and final testing	April 15, 2025
Final Delivery	Submission of all project deliverables	May 1, 2025

5. Roles and Responsibilities

- **Fullstack Developer: [** Penumetsa Abhiram Varma] - Project integration and fullstack implementation.
- **Frontend Developer:** [Yeruva Suprith Reddy] - Implements user interface components.
- **Backend Developer:** [Arnav Reddy Padamati] - Develops database and backend infrastructure.
- **UI/UX Designer:** [Jaya Siddu Karthikeya] - Designs intuitive interfaces and improves user experience.
- **Tester & Documentation Specialist:** [Amarnath Reddy N] - Conducts testing, debugging, and prepares final documentation.

6. Assumptions and Constraints

Assumptions:

- Juno ERP will provide student score data in a structured format.
- The tool will be accessible through university-provided infrastructure.

Constraints:

- Limited budget and resources for system development and maintenance.
- The accuracy of visualizations depends on data quality and completeness.
- Compliance with data privacy and security regulations.
- Grade distribution visualizations for students will be implemented in future phases
- Export functionality for reports will be developed in a subsequent release.

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7. Approval Signatures

Client:

Name: _____

Title: _____

Signature: _____

Date: _____