**Project Plan Document**

| Project number | *4* |
| --- | --- |
| Project Title | *Learning Management System (LMS)* |
| Document | *Project Plan* |
| Creation date | *Jan 30th, 2025* |
| Created By | *Vishak Kashyap K, Shreyas Deb* |
| Client | *Bibhu Prasad Sahoo, uExcelerate* |

# Brief problem statement

To develop a Learning Management System (LMS) that aims to provide a self-learning platform focused on developing leadership skills of the learners enhanced with an AI-powered recommendation engine. The goal is to offer learners personalized content based on their interests, skill levels, and learning progress. The system will also cater to coaches and administrators by providing tools for content management, assignment creation, and learner’s progress tracking.

# Team Members (Roles are subject to change)

* Vishak Kashyap K – Creating wireframe and design prototype using Figma.
* Shreyas Deb – Setting up backend environments and basic server-side functionalities. (Node and Python).
* Kushal Mangla – Creating wireframe and design prototype using Figma.
* Arshiya Noureen – Understanding Moodle API Documentation for ease of Moodle integration.
* Sanyam Agrawal – Setting up Moodle environment and integration with Node and Python.

# Team Communication

* Meetings: Weekly team meetings (virtual and in-person as needed).
* Communication Channels: Slack, WhatsApp, Email, and Google Meet.
* Documentation & Collaboration: Notion, Google Drive, and GitHub

# Development Environment

* UI/UX Design: Figma
* Frontend environment: Typescript (React.js, Tailwind CSS)
* Backend environment: Typescript (Node.js), Python (FastAPI), Moodle
* Database: PostgreSQL
* AI & ML Tools: TensorFlow, Scikit-learn
* Version Control: GitHub
* Collaboration & Documentation: Notion, Confluence
* Cloud Services: TBD
* Hosting & Deployment: TBD
* Testing Tools: Thunderbird, Postman, HTTPie

# Milestone Schedule

| Milestone | Due Date | Release | Deliverable? |
| --- | --- | --- | --- |
| *Project Synopsis Document* | 25/01/25 | R1 | No |
| *Project Plan Document* | 31/01/25 | R1 | Yes |
| *Create Draft Requirements* | 01/02/25 | R1 | No |
| *FInalize Draft Requirements* | 03/02/25 | R1 | Yes |
| *Develop UI/UX Wireframes* | 03/02/25 | R1 | Yes |
| *Backend Servers and Moodle Initial Integration* | 03/02/25 | R1 | No |
| *Frontend Setup and Basic Components* | 07/02/25 | R1 | No |
| *Database Schema Design and Setup* | 12/02/25 | R1 | No |
| *Assignment & Content Management (WITH Admin UI)* | 21/02/25 | R1 | Yes |
| *Learner Dashboard with Progress Tracking* | 10/03/25 | R1 | Yes |
| *Data Acquisition and Preprocessing* | 15/03/25 | R2 | No |
| *Recommendation Engine (Preliminary)* | 24/03/25 | R2 | No |
| *Many - to - Many User Role Management* | 27/03/25 | R2 | No |
| *Recommendation Engine (Finalized Model)* | 31/03/25 | R2 | Yes |
| *Integration of Third-Party APIs* | 07/04/25 | R2 | Yes |
| *Recommendation Engine Integration with LMS* | 10/04/25 | R2 | Yes |
| *Testing* | 12/04/25 | R2 | Yes |
| *Deployment* | 14/04/25 | R2 | Yes |