

Scenario : Developing a Student Management Portal

- A College administration has approached your team to develop a Student Management Portal to help manage student records, view courses , and track student attendance.
- The solution must have secure login for administrators and provide a user-friendly interface for managing the data.
- Divide into 3 sprints.
- For each sprint you can write Objective , tasks , success criteria.

Step 1 : Problem Statement

- A college administration requires a Student Management Portal to efficiently manage student records, allow students to view courses, and track attendance. Currently, these processes are either manual or inefficient, leading to administrative delays and data inconsistencies. Our goal is to develop a secure and user-friendly system that streamlines these tasks.

Step 2: Break Down the Solution into Sprints

The Project will be developed in three sprints, ensuring incremental delivery and continuous feedback.

Sprint	Focus Area	Time Duration
Sprint 1	User Authentication and Dashboard UI	2 Weeks
Sprint 2	Student and Course Management	3 Weeks
Sprint 3	Attendance Tracking and Reporting	4 Weeks

Step 3 : Expected Deliverables for Each Sprint .

Sprint 1 : User Authentication and Dashboard UI

- Secure login/logout functionality for administrators.
- A dashboard UI displaying student records.
- Database schema for authentication and user roles.

Sprint 2 : Student and Course Management .

- CRUD (Create , Read , Update , Delete) operations for student records.
- Course management system(enroll, remove, update courses).
- Search and filter options for quick data retrieval.

Sprint 3 : Attendance Tracking and Reporting

- Attendance tracking system(manual and automated input).
- Attendance report generation(PDF/Excel).
- Notification for low attendance alerts.

Step 4: Emphasize How Agile Ensures Incremental Progress

- “By working in sprints, we will deliver a working software increment at the end of each sprint , ensuring the client sees continuous progress.”
- “We will collect feedback at the end of each sprint, allowing us to make necessary improvements without waiting for the final product release.”
- “Agile helps us remain flexible- if new requirements arise, we can adapt without disrupting the entire project.”

Frontend(User Interface and User Experience)

- React.js(for dynamic UI) + Tailwind CSS (for styling)

Backend

- Java and Springboot

Database

- PostgreSQL