

Agile Software Engineering Project

This project aims to develop a comprehensive University Management System using the Scrum framework. The system should be designed to streamline administrative and academic processes, improve communication, and provide a centralized platform for various university stakeholders. The project will be divided into four major sections, each representing a distinct product area that will be developed through a series of sprints. The agile approach will allow the team to progressively refine requirements and deliver working increments of the system to key users.

High-Level Requirements:

1. Facilities Module

This module focuses on the management of the university's physical and digital infrastructure. It will provide functionalities for:

- **Classroom and Laboratory Management:** A system for scheduling, booking, and tracking the usage of classrooms and labs. It would include features for viewing room availability, reserving spaces for classes or events, and reporting maintenance issues.
- **Administrative Office Automation:** Tools to support various administrative tasks, such as managing student records, generating transcripts, and handling admission applications. The goal is to digitize and automate paper-based processes.
- **Resource Allocation:** Functionality to allocate and track equipment, software licenses, and other resources to specific departments, faculty, or students.

2. Curriculum Module

This section is dedicated to the core academic functions of the university. It would manage the structure and delivery of educational content, including:

- **Core and Elective Subject Management:** A system to define, organize, and manage the university's course catalog. It will allow students to view required core subjects and select from available electives.
- **Technology Integration:** Features to support modern teaching methods, such as integration with learning management systems (LMS) for online assignments, quizzes, and multimedia content delivery.
- **Assessment and Evaluation:** Tools for professors to create, administer, and grade assignments and exams. It will also provide a secure way for students to view their grades and feedback.

3. Staff Module

This module will manage information and provide tools for all university staff members. It will include features for:

- **Professor and Teaching Assistant (TA) Management:** A centralized directory of academic staff with their contact information, office hours, and assigned courses. It will also include features for TAs to manage their roles and responsibilities.
- **Performance Tracking:** Functionality to track staff performance, publish faculty research, and manage professional development activities.
- **Payroll and Human Resources Integration:** A simplified interface for staff to access payroll information, manage leave requests, and view their benefits.

4. Community Module

This section will focus on improving communication and collaboration among all members of the university community. It will include:

- **Parent-to-Teacher Communication:** A secure portal for parents to communicate with teachers, view their child's progress, and receive important announcements. This feature will be a key part of the system's external-facing interface.
- **Student-to-Staff Communication:** A messaging system or forum for students to ask questions, schedule meetings with professors, and receive academic guidance.
- **Announcements and Events:** A centralized hub for posting university-wide announcements, upcoming events, and important deadlines to ensure everyone stays informed.

Evaluation Criteria

Criteria	Max Grade	Grade
Git repository	2 Marks	
Complete Backlog description for all sprints	3 Marks	
Change Anticipation in Backlog	3 Marks	
Complete the Implementation of the requirements	3 Marks	
Change anticipation in Database Architecture, covering all the rules.	3 Marks	
All backlog items are added to Jira	3 Marks	
Implement the EAV model	5 Marks	
Teamwork	3 Marks	
Total	Out of 25	