

# 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	