



Software Engineering Group Project

Project Title: Smart University Portal

Project Overview

The **Smart University Portal** is an all-in-one platform designed to simplify campus operations. It provides students, teachers, and admins with smart tools for managing academic tasks. The system integrates **AI chatbot support** and **fingerprint-based login** to ensure easy, fast, and secure access for all users.

Key Features by User Role

Students:

- Login/logout
- Modify personal information
- View/download course materials
- View university notices

- Register for courses
- Make tuition and other payments
- Download transcript and grade reports
- Submit feedback (on faculty/courses)
- View class schedules, exam routines and seat plans
- Get help through live chat

Teachers:

- Login/logout
- Update personal information
- Upload and manage course materials
- View class schedules, exam routines and seat plans
- Send notices to assigned student groups
- Manage assigned course activities
- Generate academic and attendance reports

Admins:

- Login/logout
- Modify their own information
- Add or remove student/teacher
- View and edit student/teacher data
- Send notices
- Manage courses across departments
- Generate academic, attendance, and financial reports

System Entities

Ai Chatbot:

- Operates 24/7 as a virtual assistant
- Handles common queries:
 - Class times, deadlines, course info, syllabus outlines
 - Personalized reminders (e.g., "You have class at 10:00 AM")
 - Campus guidance (e.g., "Where is Room 6105?")
- Reduces pressure on admin/teacher workload by automating responses

Fingerprint Authentication System:

- Provides fast, secure, and reliable login for all users
- Records attendance automatically when students/teachers log in
- Replaces traditional username/password model for better access control

Use case Diagram

