Context Objects - Software Requirements Specification

Human Actors

ID	Context Object Name	Type	Description	Interaction with System
CO1	Student	Human Actor	University student accessing academic and admin services via the portal	Logs in to view schedules, grades, register for courses, pay fees, and receive notifications
CO2	Parent or Guardian	Human Actor	Individual monitoring student's academic progress and fee status	Views grades and attendance. Receives related SMS alerts
CO3	Lecturer	Human Actor	Faculty managing student learning records and communication	Uploads grades, marks attendance, uploads course materials, sends announcements
CO4	Administrator	Human Actor	Staff managing the platform, user access, and system settings	Manages system users, configures portal, uploads announcements

Non-Human Entities

ID	Context Object Name	Type	Description	Interaction with System
CO5	Campus Management System	External System	Existing system storing core student data like grades, attendance, billing info	Provides real-time academic and billing data
CO6	SMS Gateway	External Service	Sends SMS alerts such as attendance alerts, fee reminders, academic updates	Sends out automatic alerts based on system triggers
CO7	Authentication Service	External Service	Validates login credentials which is student ID and password via centralized login portal	Used during user login/logout

CO8	University Academic Calendar System	External System	Manages academic dates like exams, course add or drop deadlines	System pulls academic event data to show in portal
CO9	Learning Management System	External System	System hosting learning materials and assignments such as Moodle	Accessed by students and lecturers via links or integrations
CO10	University Database	Data Store	Stores users, logs, preferences, and system-specific info	Used by all system modules
CO11	Notification Scheduler	Internal Module	Engine for scheduling and queuing alerts (SMS or in-app)	Automatically triggers messages based on events or thresholds
CO12	Course Management Module	Internal Module	Enables students to view/register for courses and lecturers to manage them	Allows course selection and updates
CO13	Attendance Module	Internal Module	Records and tracks student attendance	Used by lecturers to mark attendance and the system aggregates data
CO14	Announcement Module	Internal Module	Central hub for all internal announcements by admin, lecturer or system-wide	Delivers system, academic, or urgent announcements to users
CO15	IT Support and Helpdesk Module	Internal Module	Interface for users to report issues or get help	Allows ticket submissions and admin responses
CO16	Library System	External System	Provides book availability, due dates, and fines	Students can view their borrowing status

Sources of Requirements - Software Requirements Specification

1. Stakeholders

Stakeholder	Description
Student	Students require access to academic and administrative services such as grades, attendance, schedules, course registration, fee payments, and notifications.
Parent/Guardian	Parents or guardians need access to view their child's academic progress and receive SMS alerts related to attendance and fees.
Lecturer	Lecturers input and manage student academic data including grades, attendance, and course materials. They also communicate announcements.
Administrator	Admin staff manage the platform settings, user accounts, announcements, and ensure integration with academic policies.

2. Existing System

System	Description
Campus management system CMS (clic)	Stores and shares student records including grades, billing, and attendance. Needs to integrate with the new portal.
Authentication Service	Handles login and logout using centralized credentials (e.g., student ID and password).
Learning Management System LMS (ebwise)	Hosts learning materials and assignments. Integrated through the portal.
University Database	Backend data storage for user profiles, system logs, and preferences.

3. Documents

Source	Description
University Academic Policies	Define requirements for grade reporting, attendance monitoring thresholds, and course registration rules.
Fee Structure and billing Guidelines	Establishes timelines for payments, late fee rules, and reminder policies.
Communication Protocols	Outlines how and when SMS/email alerts should be sent, who receives them, and the format for announcements.
IT and Admin Workflows	Includes administrative procedures for user access, support ticket handling, and system configuration.