

Software Requirements Specification (SRS)

Project Title: Smart Class Timetable Notifier **Course:** Bachelor of Science in Information Technology

Institution: The Co-operative University of Kenya

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Date: July 2025

1. Introduction

1.1 Purpose

The purpose of this document is to define the Software Requirements Specification (SRS) for the Smart Class Timetable Notifier system. This system aims to streamline class scheduling by notifying students of their daily classes and any last-minute changes or cancellations.

1.2 Scope

The Smart Class Timetable Notifier is a web-based application that allows students to view their class timetable and receive automated notifications. The system will also enable lecturers or administrators to update schedules and send alerts in real-time. This reduces class absenteeism and improves time management among students.

1.3 Intended Audience

- Students
- Lecturers
- Department Administrators
- Academic Project Supervisors

1.4 Definitions

- **Timetable:** A schedule that shows the date, time, subject, venue, and lecturer for classes.
 - **Notification:** A reminder message sent via SMS or email.
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2. Overall Description

2.1 Product Perspective

This is a standalone web-based system with optional integration with student portals.

2.2 Product Functions

- User registration and login
- Admin interface to upload and manage timetables
- Student dashboard to view timetable

- Notification engine to send daily reminders and class updates

2.3 User Classes and Characteristics

- **Admin:** Manages user accounts and timetable entries
- **Lecturer:** Updates or cancels specific class sessions
- **Student:** Receives notifications and views personal timetable

2.4 Operating Environment

- Web: HTML, CSS, PHP, MySQL, Apache Server

2.5 Design and Implementation Constraints

- Notifications require scheduled tasks (cron jobs or email/SMS services)
- Users must have access to internet or mobile data

2.6 Assumptions and Dependencies

- Timetables are provided and updated by the university staff
 - Students will use valid email or phone numbers to receive alerts
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3. Specific Requirements

3.1 Functional Requirements

- FR1: The system shall allow admin to add/edit/delete timetable entries
- FR2: The system shall authenticate users during login
- FR3: The system shall send daily notifications to students
- FR4: The system shall allow lecturers to cancel or reschedule classes
- FR5: The system shall display a student's weekly timetable

3.2 Non-Functional Requirements

- NFR1: The system shall be responsive on both mobile and desktop browsers
- NFR2: Notifications shall be sent out at least 2 hours before class
- NFR3: The system shall support at least 1000 concurrent users

3.3 External Interface Requirements

- **User Interface:** HTML/CSS for web
 - **Database:** MySQL
 - **Notification API:** SMTP (email), Twilio (SMS)
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4. Appendices

- Appendix A: Sample Timetable Format
 - Appendix B: Use Case Diagrams
 - Appendix C: Gantt Chart for Development Schedule
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Approval:

Student: __ Date: __

Supervisor: __ Date: ____