

# Software Requirement Specification (SRS)

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Project Title: University Student Management System

Prepared By: [Your Name / Team Name]

Date: [Insert Date]

Version: 1.0

## 1. Introduction

### 1.1 Purpose

This document defines the requirements for a University Student Management System that will handle student records, academic performance, course management, and administrative processes.

### 1.2 Scope

The system will be designed to serve students, faculty, and administrative staff. It will allow registration, grade entry, attendance tracking, and result generation.

### 1.3 Definitions, Acronyms, Abbreviations

- SRS: Software Requirement Specification
- SMS: Student Management System
- MVP: Minimum Viable Product

## 2. Overall Description

### 2.1 Product Perspective

This is a standalone web-based system that can integrate with existing LMS or ERP if required.

### 2.2 Product Functions

- Student registration and profile update
- Course add/drop and enrollment
- Faculty grade submission

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- Student attendance recording
- Transcript and report generation

### 2.3 User Classes and Characteristics

- Student: Can register, view grades, enroll in courses
- Faculty: Can manage course rosters, input grades
- Admin: Can manage system users, view reports, update schedules

### 2.4 Operating Environment

- Web-based application, responsive for mobile use
- Backend: C/Java/PHP/Python
- Database: MySQL or SQLite

### 2.5 Constraints

- Should be operable in existing computer labs
- Must support concurrent access

### 2.6 Assumptions and Dependencies

- Course catalog and user info are pre-loaded
- Admin has full system privileges

## 3. System Features

### 3.1 Student Registration

- Description: Allows students to create and update their profiles.
- Input: Name, ID, Department, Password
- Output: Confirmation of registration

### 3.2 Course Enrollment

- Description: Students can add/drop/withdraw courses
- Input: Student ID, Course Code
- Output: Enrollment status

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## 3.3 Grade Entry

- Description: Faculty can enter student grades
- Input: Student ID, Course Code, Marks
- Output: Grade Confirmation

## 3.4 Attendance Management

- Description: Track attendance for each student per course

## 3.5 Transcript Generation

- Description: Admin can generate printable transcript reports

## 4. External Interface Requirements

### 4.1 User Interfaces

- Login page
- Dashboard for each user type (Student/Admin/Faculty)

### 4.2 Hardware Interfaces

- Standard desktop or mobile devices

### 4.3 Software Interfaces

- Operating System: Windows/Linux
- Web Server: Apache/Nginx

### 4.4 Communication Interfaces

- Internet access for remote use

## 5. Non-functional Requirements

### 5.1 Performance Requirements

- Must support at least 1000 concurrent users

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## 5.2 Security Requirements

- Password encryption, role-based access control

## 5.3 Usability

- Should have a clean and responsive UI

## 5.4 Availability

- Should be available 24/7 with 99.9% uptime

## 5.5 Maintainability

- Modular codebase to support future updates

## 6. Appendices

- Glossary of Terms
- Sample Forms or Screenshots (Optional)
- Use Case Diagrams (Optional)
- ER Diagram (Optional)

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