

# **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)

Prepared by:

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