### ****Software Requirements Specification****

**Project:** College Management Portal

### ****1. Introduction****

This document explains what the College Management Portal will do. It describes the basic features, design needs, and user expectations. It is made to guide how the system will be built and tested.

### ****2. Purpose****

The main goal of this system is to help colleges manage their everyday work like student records, exams, results, and fee payments through a single portal. This document will help everyone working on the project understand what the system should include.

### ****3. Scope****

This web application will include basic features such as:

* Student registration
* Faculty and course management
* Exam and result entry
* Fee collection
* Simple reports for admin

Users of the system will include students, teachers, and admin staff. Each user will have different access depending on their role.

### ****5. Functional Requirements****

* **Student Module**: Sign-up/login, view profile, check results, and pay fees.
* **Faculty Module**: Manage course content, enter grades, and view student lists.
* **Admin Module**: Add/manage students and staff, set up exams and fee structures.
* **Result Module**: Generate marksheets and publish results.

### ****6. Non-Functional Requirements****

* **User-Friendly**: Easy to use on mobile and desktop.
* **Performance**: Should support up to 500 users at a time.
* **Security**: Only authorized users can access the system. Passwords should be encrypted.
* **Availability**: Should work most of the time (uptime of 99%).

### ****7. Assumptions and Constraints****

* The project will use only free tools and platforms.
* Users must have internet access.
* System must work well on both mobile and desktop.

### ****8. Main Features****

* Login and dashboard for each type of user.
* Course and subject tracking.
* Result entry and viewing.
* Internal chat/messages.
* Downloadable reports for marks, attendance, and fees.

### ****9. Technical Tools & Interface Requirements****

* **Frontend**: ReactJS (or basic HTML/CSS for mockup)
* **Backend**: Node.js and Express
* **Database**: MongoDB or MySQL
* **Hosting**: Free cloud platforms or localhost for demo