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# Software Requirements Specification

## For

## <College management system>

Version 1.1 approved

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# Table of Contents

Table of Contents .....	ii	Revision
History .....	ii	
1. Introduction .....	1	
1.1 Purpose .....	1	
1.3 Intended Audience and Reading Suggestions .....	1	1.4
Product Scope .....	1	
1.5 References .....	1	
2. Overall Description .....	2	
2.1 Product Perspective .....	2	2.2 Product
Functions .....	Error! Bookmark not defined.	
2.3 User Classes and Characteristics .....	2	
2.4 Operating Environment .....	3	
2.5 Design and Implementation Constraints .....	3	2.6 User
Documentation .....	3	
2.7 Assumptions and Dependencies .....	Error! Bookmark not defined.	
3. External Interface Requirements .....	3	
3.1 User Interfaces .....	3	
3.2 Hardware Interfaces .....	5	
3.3 Software Interfaces .....	5	
3.4 Communications Interfaces .....	5	
4. System Features .....	5	
4.1 System Feature 1 .....	Error! Bookmark not defined.	4.2 System
Feature 2 (and so on) .....	Error! Bookmark not defined.	
5. Other Nonfunctional Requirements .....	8	
5.1 Performance Requirements .....	8	
5.2 Safety Requirements .....	8	
5.3 Security Requirements .....	8	
5.4 Software Quality Attributes .....	9	
5.5 Business Rules .....	9	
6. Other Requirements .....	9	

# Revision History

Name	Date	Reason For Changes	Version

# **1. Introduction**

## **1.1 Purpose**

A college management system provides integrated user friendly customizable solution design to address all the functionalities in a college system. The system provides a students to admitted easily. And it is also to maintain all activities of this college properly including admission.

## **1.2 Intended Audience and Reading Suggestions**

This Software Requirements Specification document is intended for software engineers, system testers, software designers in developing, testing, and producing the safety and health management system and is for everyone who is somehow related with this project. It is suggested to read the sections sequentially, and to reference the appendices as one progresses, in order to clarify jargon terms and definitions and reach out the basic requirements. The developer or admin can read this documentation for future use or maintenance. Users and other external entities can read this documentation to know its terms and conditions.

## **1.3 Product Scope**

The main objective of the College Management System is to manage the details of College, faculty, course, batch, session. It manages all the information about college, student, session, college.

## **1.4 References**

<https://www.atlassian.com/jira-software/project-mgmt>

<https://www.monash.edu/business-study/management>

<https://projectsgeek.com/2014/02/college-management-system-project.html>

## **2. Overall Description**

### **2.1 Product Perspective**

The college management system is a self-contained system that manages activities of the college as students information. Various stakeholders are involved in the system.

### **2.2 User Classes and Characteristics**

The entire college management system suite program has a set of users, each with different security privileges. It contains the interfaces of various manipulate students which are our basic target to perform and giving the clients an efficient solution.. The characteristics aim at implementing the interfaces of the requirements. These user types are-

#### **1. Administrative officer Module:**

- Monitor students report.
- Watch admission of students.
- Control/Validate login info.
- Add or remove students.
- Update any data
- Create result sheet for students

#### **2. User Module:**

- View profile status with teachers.
- View student details.
- View result from teacher.
- Manage own profile.

#### **3. Teachers Module:**

- Manage student account opening and updating.
- Create, manage meeting with student.
- Create result for students.

#### **4. Students Module:**

- Check status.
- Get Result sheet.
- Get Progress report
- Get Examination Details.

#### 5. Employee Module:

- Keep clean.
- Provides any help for teachers.
- Provides any help for students

## **2.3 Operating Environment**

As it is a web based application, this system is compatible with any browser (suggested for using any updated browser), using in a desktop environment. There is specially designed for windows only.

## **2.4 Design and Implementation Constraints**

This system hasn't any developers support options. A lower performance hardware is suggested to avoid due to low quality performance. Sometimes the performance may be slow or takes time as many users access the system at a time.

## **2.5 User Documentation**

Documentation about user manuals (how to use the system), providing necessary video tutorial, online help are delivered along with the system to help the user to get rid of from any problem

# **3. External Interface Requirements**

## **3.1 User Interfaces**

The system has all the requirements that the user needed. User can visit the site to get any related information what they want to know but cannot edit or change it according their want, as they don't have that right. The system will take the user in the home page and welcome the user after loading the page. This can also switch different pages from any page. There will be log in or log out option to easily log in or out and an exit button to exit the system instantly

### 3.2 Hardware Interfaces

All components able to be executed on personal computers with Windows OS platforms.

- Operating system: Windows
- Hard disk : Minimum 5MB
- RAM: 64 MB
- Processor: Dual-core CPU

### 3.3 Software Interfaces

This system will be able to interface with the bigger and inherit the global, shared,structs, enum, functions, and variables, as well as use its own data pertinent and exclusive to itself. The system should be designed in this way that it is accessible from any kinds of software settings. The software interface should collect the information that the user needs. It will interface with standard Windows API and GUI. Data that will be shared between computers and instance of the software being run will be pushed and pulled from the patient database as needed/requested. This database can be configured and deployed for usage in case-specific usages for each hospital network that uses the software in its own LAN or intranet. All offline and online access will be monitored, for transparency purposes, and in order to reduce abuse and unauthorized access of the system.

### 3.4 Communications Interfaces

This project can compatible with all platforms. Connections to the system will be over TCP/IP connection, project supports all types of web browsers. Simple mail transfer protocol/ Hypertext transfer protocol for generating emails of reports from the software. FTP can also be used in pushing generated document reports to a hospitals FTP server. All communication interfaces should have high baud data Tx and Rx rates ranging from Mbps to Gbps.

## **4. System Features**

### **4.1 Description and Priority**

This is designed for managing college center's data and schedule, it contains the option for adding d about college, students's & teacher's information. Thus, both the clients and organization will be benefited from this system.

### **4.2 Functional Requirements of the system:**

1. Admin:
2. Employee:
3. Student :
4. Teacher:
5. committee :
6. Guardian:

**The functional requirements of this system are:**

1. Register new students.
2. Record the attendance of students.
3. Record the internal marks of students.
4. Record the feed details of students.
5. Register a new teacher/employee.
6. Register a new user for the system.
7. Record the salary details of employees.
8. Record the course details and subject information. 9. Record the scholarship details and information.



For specific function:

Admin:

- ☐ Log in /log out
- ☐ Maintain account.
- ☐ Teacher recruitment
- ☐ Teacher fired
- ☐ Call meeting management
- ☐ security

Teacher:

- ☐ Log in /log out
- ☐ Attendance
- ☐ Budge
- ☐ Continuous assessment
- ☐ Syllabus
- ☐ Make result
- ☐ Progress report
- ☐ Cheek status
- ☐ Routine
- ☐ Take examination
- ☐ Take class

## Students:

- ☐ Log in /log out
- ☐ Attendance
- ☐ Syllabus
- ☐ Cheek status
- ☐ Routine
- ☐ Scholarship
- ☐ Registration
- ☐ Participate co curriculum activities
- ☐ Participate class
- ☐ Participate examination
- ☐ Get result ☐ Admit

## Employee:

- ☐ Scholarship
- ☐ Registration
- ☐ Keep clean
- ☐ Help teacher
- ☐ Help student

## Committee:

- ☐ Teacher recruitment
- ☐ Teacher fired
- ☐ Call meeting and management

## **Guardian:**

- ☐ Check student progress
- ☐ Check student attendance
- ☐ Check student payment

## **5. Other Nonfunctional Requirements**

### **5.1 Performance Requirements**

The performance of the project is at its best when the following are regularly done:

- Password Management
- Regular Database Archiving
- Virus Protection

### **5.2 Safety Requirements**

Humans are error-prone, but the negative effects of common errors should be limited. E.g., users should realize that a given command will delete data, and be asked to confirm their intent or have the option to undo.

### **5.3 Security Requirements**

Each member is required to enter an individual Username (Email ID) & password when accessing the software. Administrators have the option of increasing the level of password security their members must use. The data in the database is secured through multiple layers of Protection. One of those security layers involves member passwords. For maximum Security of your software, each member must protect their password.

## 5.4 Software Quality Attributes

The Quality of the system is maintained in such a way so that it can be very user-friendly. The software quality attributes are assumed as under:

- Accurate and hence reliable.
- Secured.
- Fast Speed.
- Compatibility.

## 5.5 Business Rules

Business rule is a requirement that specifies the constraints or structure of a system. Effectively stating, organizing, and managing business rules will help ensure that the system can be appropriately applied. The authority and user both cannot ignore these rules. The rules and regulations, the legal procedures, the cost of the system etc will follow this rules. Business rules have the right to make any decision or plan if necessary

# 6. Other Requirements

## Appendix A: Glossary

EMR- Electronic Medical Report

MIS-Management Information System

Enum-Enumeration

API-Application Programming Interface

GUI-Graphical User Interface

LAN-Local Area Network

TCP-Transmission Control Protocol

IP-Internet Protocol

FTP-File Transfer Protocol