# SOFTWARE REQUIREMENTS SPECIFICATION

for

# College Management System

Release 1.0

Version 1.0 approved

Prepared by Team 3

# **Contents**

# **Revision History**

Revision	Revision Date	Description of Change	Author/Modifier
v1.0	sept 12, 2015	Initial Document (Draft Copy)	subham/vikash

# 1 Introduction

The title of the project is COLLEGE MANAGEMENT SYSTEM FOR COLLEGE (CMS). CMS is an Intranet based application that aims at providing information to all the levels of management within an organization. This system can be used as a information management system for the college.

For a given registrar / staff / student (Technical / Non-technical) the Administrator creates loginid & password, using these registrar/ staff / student (Technical / Non-technical) can access the system to either upload or download some information from the database.

The front-end will be HTML pages with Java Script for client side validation where as all business logics will be in PHP reside at middle layer. And these layers will interact with third layer of database, which will be MySql database. The web server will be Apache. To start working on this project environment required is a server having Apache as web server, MySql as database and LAMP(Linux,Apache,MySql and PHP) as development environment

### 1.1 Purpose

This document is the Software Requirement Specification (SRS) for the College Management System for College (CMS) project. The purpose of this document is to describe the functionality, requirements and general interface of the CMS.

### 1.2 Project Scope and Product Features

To promote College management system(CMS), especially in Our College, there is a need for a tool to College Management in a user-friendly format so that users can Manage/Access/Search information. College Management System (CMS) is the obvious tool to achieve this because it provides functionality reference.

# 1.3 Definations, Acronyms, and Abbreviations

#### 1.3.1 Definations

- **Browser** : Software used to view hypertext documents. Internet Explorer and Netscape Navigator are examples of browsers.
- HTML: Hypertext Markup Language is a specification for graphical layout of a document. The specification calls for the document to be stored as text containing a series of tags that contain formatting information
- PHP
- Javascript
- Mysql
- User Friendly

#### 1.4 References

# 2 Overall Description

#### 2.1 Product Perspective

The product will be a standalone application and may be run on multiple systems within an Intranet network. The product will require a keyboard, mouse and monitor to interface with the users. The minimum hardware requirements for the product are specified in this document

#### 2.2 User Classes and Characteristics

The target audience for CMS product is the college Administrator/students/faculty/staff (Technical/Non- technical) .The users for this system are

- Administrator The Super user of the system. Mainly focuses on administratiive and academic related issues.
- Student A user with limited access rights.
- Staff A user of the system who has more access rights than a normal user.
- Users for specific task.
  - Warden/HEC head: For Hostel management
  - Bus coordinator: For Transport management
  - Mess Committee Head: For mess

#### 2.3 Constraints

Since, the proposed College Management System to be developed using Open-Source environment, therefore following are the limitations pertaining to the selected technology:

- Limited Experience in Software Development Processes.
- Limited Internet facility.
- Since Hostel is far away from Campus, resource availability is inconsistent.

- 2.4 Assumptions and Dependencies
- 2.5 Apportioning of Requirements

# 3 Specific Requirements

This section contains all the software requirements at a level of detail sufficient to enable designers to design a system to satisfy those requirements, and testers to test that the system satisfies those requirements. Throughout this section, every stated requirement should be externally perceivable by users, administrator, or, other external systems.

#### 3.1 External Interfaces

#### Client:

- Hardware platform:
  - PIII or above with
  - -RAM of 128 or above MB
  - -HardDisk 20GB or above GB
- Software Platform:
  - -Javascript Enabled Browser

#### Server:

- Hardware Platform:
  - PIII or above with
  - RAM of 128 or above MB
  - HardDisk 20GB or above GB.
- SoftwarePlatform:
  - -HTML,PHP,JavaScript,MySql,Apache

## 3.2 Functional Requirements

The requirement of the user is to:

1. Student Record: At the time of admissions, the student will be asked to enter all the personal and academic related information in this portal. The attributes

will consist of: Name, Age, Twelvth Marksheet, JEE mains roll no, Rank, Birth certificate, Permanent Address, email id, phone no.

- 2. Students Registration: At the starting of the semester, student have to register for the particular semester. Agreeing on taking the courses and the electives. The student will login into the portal using his login id and password. These ids will be provided by the college at the time of the admissions
- 3. Faculty Record: At the time of joining the college, faculties will be asked to enter their personal and academic related information into the database, which consists of: Name, Age, email id, phone no, permanent address, certificates, degrees, area of expertise and interest.
- 4. Result: Student can access their results of past semester and generate a pdf file and print by logging into the portal. The result of other student will not be visible to other students.
- 5. Time Table Management: Students, Faculty and Staff every one can view the current timetable and take a printout of the same after logging into the portal. The administrator can change and upgrade the timetable if she wants to. An automatic timetable will be generated by giving the necessary constraints.
- 6. Fee Receipt generation: Student can generate fee receipt by giving the bank details in the system authenticated by the administrative head for the current and the previous semesters.
- 7. Request for the certificates: Students can request for the different certificates from the administration by applying formally using a request letter for the same from his/her account.
- 8. Room Allotment: Information about the room allotment will be visible to everyone after logging into the system. Access will be given to the administration and the HEC (Hostel Executive Committee).
- 9. Room wise resources distribution: Information about the room wise resource will be recorded and updated by the HEC for the maintenance of the hostel and the college. These include quantity, price, date of purchase, warranty period, condition, brand. The items contains fans, chairs, table, tubelight, switch board, CFL, bulb.

- 10. Monthly menu and timings: It will be visible to all the members of the organisation. Access will be given to Mess Committee for the upgradation and maintenance of food.
- 11. Feedback and complaint: In this form, one can lodge a complaint or give a feedback about by selecting the domain: Academics, Administration, Hostel, Mess, Transportation. The head of each department will give response accordingly.
- 12. Exam Management: An automated/manual timetable will be generated by giving the constraints like timings, no. of rooms, no. of students, no. of invigilators. The access will be given to the administration.
- 13. Assignments: The faculties will have access to this domain according to their subject and batch. After logging into the portal, the students can take a copy of the assignments uploaded by the faculty for their course.
- 14. Access/ Search, Manipulate, Update and Delete information.
- 15. Login to the system through the first page of the Portal.
- 16. Change the password after logging into the system
- 17. View/change account details.
- 18. Can get help through the help option to view different features of the system.
- 19. Bus Schedule: The manual/automatic timetable can be generated. The access rights will be given to the Bus incharge. The information about the buses, drivers including the license no, phone no. of the drivers will be visible to the Bus incharge. Every one can see the timetable.
- 20. Course Evaluation: At the end of the semester, a new page will be available for evaluation of a particular course for the students. The access of this content will be given to the administrative head.

- 21. College Information: The general information about the college will be given here including Name, Affiliated to, Address, Contact details, Email id, College Registration No.
- 22. Alert: An alert sms will be given to the faculty members and drivers beforehand consisting of name of the faculty, driver, phone no, vehicle no, location and timing.

### 3.3 Design Constraints

### 3.4 Software System Attributes

There are a number of attributes of software that can serve as requirements. It is important that required attributes by specified so that their achievement can be objectively verified. The following items provide a list of software system attributes:

#### Reliability

Must maintain data integrity. Computer crashes and misuse should not affect a user's history

#### **Availability**

The CMS Portal shall be available, up and running for 24\*7 throughout the year except due to the routine maintenance activities.

#### Security

Administrator and Users with valid credentials will be able to log in to Portal. Administrator will have access to the database structures at back-end. Administrator will have the rights for modifications as well as any Updation work for the datasets and website. Access to the various subsystems will be protected by a user log in screen that requires a user name and password.

# 4 Supporting information

- 4.1 Table of contents and index
- 4.2 Appendixes