



Cloud-Based College Management Information System for Autonomous Institute

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Abstract: *In the modern world of technology, computers are affecting our lives in more ways than we probably are aware of. COMPUTERISED MANAGEMENT, maintaining information of an educational institutes, Colleges, other the list is endless This paper specified all working that taken by a College Management .If Management want necessary information he checks the information about a student, staff, worker etc. It is difficult to prepare the manual work to store the information about the all students, teachers as well as about workers. So this helps to store those type of information using computerized system in cloud Environment. This paper is aimed at developing an Cloud based College Management System (CMS) that is of importance to either an educational institution or a college. The system (CMS) is Cloud based application that can be accessed throughout the institution or a specified department. This system (CMS) is being developed for Christian Eminent College Indore ,MP,India to maintain and facilitate easy access to information. For this the users need to be registered with the system after which they can access or modify data as per the permissions given to them. CMS is a Cloud based application that aims at providing information to all the levels of management with in an organization. This system can be used as a knowledge/information management system for the college. For a given student/staff (technical/Non-technical) can access the system to either upload or download some information from the database.*

Keywords: *JSP, SQL Server, JAVA, Browser,Cloud-based system, college management ,information system, document management system, management information system.*

I. INTRODUCTION

CMS is Cloud 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 student/staff (Technical / Non-technical) the Administrator creates login id & password, using these student/ staff (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 Server page for client side validation where as all business logics will be in Java reside at middle layer. And these layers will interact with third layer of database, which will be SQL database. The web server will be Tomcat5.5. To start working on this project environment required is a server having Tomcat5.5 as web server, SQL as database and Java Runtime Environment (JRE) as development environment. The Paper is divided into 6 scenarios; each scenario can be developed independently. And knowledge of Java with SQL Server is desirable to execute this project.

1.1 Purpose Of Document:

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

1.2 Scope for Development of this paper:

The requirement of the user is to:

- Access/ Search information.
- Login to the system through the first page of the application
- Change the password after logging into the system
- View/change his/her details.
- Can get help through the help option to view different features of the system.
- Students can give feedback on college/staff/any other student.
- An admin login should be present who can read as well as remove any uploads

1.3 Main modules of the system:

A. Campus Information:

This module gives the information about

- **Buildings/Blocks:** It contains the information about the total number of blocks

present in the campus and also the number of rooms present in each block.

- **Laboratories:** This gives the information about the number of laboratories present in each department.
- **Library:** students can borrow/return and can view status of books present in the Library

B .Administration:

This module deals mainly with,

- **Admission:** This mainly deals registering the students/staff and assigning them with a login id and password.

C. Department Information:

This module gives the information about,

- **Course:** This contains the information about the number of the courses offered by the college and number of seats present in each.
- **Staff:** This contains the number of staff available in each department.
- **Infrastructure:** This has the details of the assets allotted for each department.
- **Syllabus:** This provides the academic syllabus of the students from different branches.

D. Staff Information:

This module deals mainly with,

- **Profile:** This provides personal details of the staff.
- **Attendance:** This provides the staff with his/her attendance details.
- **Salary:** This provides the staff with his/her salary details.
- **Feedback:** This feature enables the staff to provide feedbacks to the management.
- **View Student Details:** This provides the staff to view the student details.

II. PURPOSE

Purpose of College Management System for a College (CMS) Design Document is to describe the design and the architecture of CMS. The design is expressed in sufficient detail so as to enable all the developers to understand the underlying architecture of CMS. Logical architecture of JDBC driver, Server, DML, DDL, Session and Data Store are explained.

2.1 TARGET AUDIENCE:

This Design document is intended to act as a technical reference tool for developers involved in the development of College Management System (CMS). This document assumes that you have sufficient understanding of the following

Concepts:

- RDBMS and its various component modules.
- SQL
- Java and JDBC
- Interaction Diagrams
- Classes and Interfaces

III. PRE-REQUISITES

3.1 Java

CMS requires Java JRE 1.5 or higher. Since CMS is written in Java, it can run on any platform that supports the Java runtime environment 1.5 or higher. The compiled files are contained in Java Archives (JAR's) and have to be defined in the CLASSPATH environment variable.

3.2 HTML

HTML is a hypertext markup language which is in reality a backbone of any website. Every website can't be structured without the knowledge of html. If we make our web page only with the help of html, than we can't add many of the effective features in a web page, for making a web page more effective we use various platforms such as CSS. So here we are using this language to make our web pages more effective as well as efficient. And to make our web pages dynamic we are using Java script.

3.3 CSS:

CSS Stands for "Cascading Style Sheet." Cascading style sheets are used to format the layout of Web pages . They can be used to define text styles, table sizes, and other aspects of Web pages that previously could only be defined in a page's HTML . The basic purpose of CSS is to separate the content of a web document (written in any markup language) from its presentation (that is written using Cascading Style Sheets). There are lots of benefits that one can extract through CSS like improved content accessibility, better flexibility and moreover, CSS gives a level of control over various

presentation characteristics of the document. It also helps in reducing the complexity and helps in saving overall presentation time. CSS gives the option of selecting various style schemes and rules according to the requirements and it also allows the same HTML document to be presented in more than one varying style.

3.4 JAVA SCRIPT:

JavaScript is considered to be one of the most famous scripting languages of all time. JavaScript, by definition, is a Scripting Language of the World Wide Web. The main usage of JavaScript is to add various Web functionality, Web form validations, browser detections, creation of cookies and so on. JavaScript is one of the most popular scripting languages and that is why it is supported by almost all web browsers available today like Firefox, We used the browser Opera or Internet Explorer. JavaScript is considered to be one of the most powerful scripting languages in use today. It is often used for the development of client -side web development. JavaScript is used to make web pages more interactive and dynamic. JavaScript is a light weight programming language and it is embedded directly into the HTML code. JavaScript, as the name suggests, was influenced by many languages, especially Java.

IV. RESULTS

Login Form :

The system starts with login page where the registered user can enter user name and password to be able to access the system. Fig. 1 shows login form which includes registration path also.

Fig(1) : Login Form

Registration form:

Fig. 2 shows registration form which contains details of student information during admission

fig (2)Registration form

Registration Confirmation:

Email : mkumbhcar@yahoo.com



Password: *****

fig(3) Registration Confirmation

V. CONCLUSION

This paper assists in automating the existing manual system. This is a paperless work. It can be monitored and controlled remotely. It reduces the man power required. It provides accurate information always. Malpractice can be reduced. All years together gathered information can be saved and can be accessed at any time. The data which is stored in the repository helps in taking intelligent decisions by the management. So it is better to have a Web Based Information Management system. All the stakeholders, faculty and management can get the required information without delay. This system is essential in the colleges/hostels and universities.

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BIOGRAPHY



Rajesh Shah received M.Phil (Comp. Sc.) from Gloabal Univ., Nagaland ,India. He has more them 21 year Experience in academic as well as administrative post. His Research area are web mining, data mining, image processing . He Guided various projects for under-graduate and post-graduate level students. He is working as a Professor and Head of the department of Computer Science & Electronics. He had attended many conferences and Seminars at National and International Level.



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