Information Management System for Faculty and Students

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Abstract— Information Management System for Faculty and Students is a system developed using PHP that provides a number of operations such as uploading, editing, deleting etc. The users of the system will be the college staff (including the admin, HOD and examiner) and students. Information Management System deals with all kind of student details, academic related reports, college details, course details, curriculum, batch details, placement details, assignment list, syllabus, lesson plans, test papers and experiment lists. It tracks all the details of a student from the day one to the end of the course which can be used for reporting purpose, tracking of attendance, progress in the course, completed semesters, years, final exam result and all these will be available through a secure, online interface embedded in the college’s website. It will also have faculty details, batch execution details, students’ details, the various academic notifications to the staff and students updated by the college administration. It also allows them to explore all the activities happening in the college. This program accelerates reaction time and improves accuracy. The objective of our project is to develop an application which will automate the process of managing all the details required for all the educational institutes.

Keywords—Information Management System, Automated, PHP, JavaScript, HTML

I. INTRODUCTION

Information Management System contains various details of staff as well as students of various departments in their college or any educational institute. The details include lesson plans, experiment list, assignments list, syllabus and their feedbacks. College staff will be able to directly access the complete academic status of all the students. The system utilizes user authentication, displaying only information necessary for an individual’s duties [1]. Also the system has security and a level of integrity maintained that allows only authorized users to create or update their information in the system. Additionally, each sub-system has authentication allowing authorized users to create or update information in that sub-system. All data is thoroughly reviewed and validated on the server before actual record alteration occurs. In addition to a staff user interface, the system plans for student user interface, allowing users to access information and submit requests online thus reducing processing time. All data is stored securely on SQL servers managed by the college administrator and ensures highest possible level of security. The system features a complex logging system to track all users access and ensure conformity to data access guidelines and is expected to increase the efficiency of the college’s record management thereby decreasing the work hours needed to access and deliver student records to users.

II. FUNCTIONS PERFORMED BY THE USERS

Users of the software will be ADMINISTRATOR, HEADS OF THE DEPARTMENTS, FACULTY MEMBERS, EXAMINER and STUDENTS. Every user will be provided with a proper username and password facility. Every faculty in our college will be provided with a feature like ISO profile where in each one of them will be allowed to upload and modify according to their hierarchy and keep their profiles up to date and also carry out ISO related work. The system will provide online feedback mechanism for every faculty and result analysis mechanism for every subject. This system will satisfy the goal of centralized monitoring and will be highly...
reliable. It will automate the manual work and ease the process of notifying faculties.

A. Administrator:
There will be an administrator who will be given all rights to access each and every details related to the software. Also he will be responsible for adding new faculty to the system and assigning them with appropriate rights. This system has Administrator which is at the top most level with all possible rights.

 a) The administrator will only be responsible for adding new faculty to the system.
 b) He will distribute the load of lectures for individual teachers (e.g. Sr. Teachers -12lecs/week, Jr. Teacher-16lecs/week).
 c) Will introduce a general time table for all divisions of IT department.

B. Faculty Members:
Faculty has limited access to the system as per their designation. Every faculty will be provided with their unique login ID’s and Password. Unauthorized access is denied. On successful login:

 a) Lectures will get their respective time tables from the general time table uploaded by the administrator.
 b) Will see their allotted subjects and the respective classes’ semester wise and can view the details (lesson plan, syllabus, list of experiments and assignments) of subjects.
 c) They can also upload test papers for their subjects which will be password protected and can be viewed by that particular teacher and HOD only.
 d) They can modify their own profile and view general details of others profiles.
 e) Can view Feedback for their subjects only.
 f) Can see result analysis for their subjects only

C. Head of the Department:
HOD has following rights:

 a) Can view the accounts of every faculty.
 b) Can view Feedbacks for all teachers of the IT department.
 c) Can view Result analysis for entire IT department.
 d) HOD can send emails to every faculty and also can send group emails.
 e) Uploading of notifications for the department.

D. Students:
On successful login Students:

 a) Can view Time Table.
 b) Can view Assignment list and Experiment List.
 c) Can give Feedback.

E. Examiner:

 a) Examiner will enter marks of students.

 b) As per the marks entered by the examiner results analysis will be done and will be displayed in graphical format.
 c) Feedback received from the students will be computed and the result will be displayed in graphical format.

 III. SYSTEM DESIGN
This deals with data flow diagram, detailed flow graph, requirement analysis, and the design process of the front and back end design of the student information management system.

IV. USER INTERFACE DESIGN

![User Interface Diagram](image)

Fig. No. 1 User Interface Diagram

V. TECHNOLOGY USED:

A. HTML
HTML stands for ‘Hypertext Markup Language’. It acts as a backbone of all the WebPages. One needs to have a thorough knowledge of HTML for developing the structure of a website. If a web page is developed by only using HTML, the scope of providing a number of effective features reduces. Thus, to make a web page more effective a different feature which can be adopted is Cascading Style Sheets (CSS). Moreover, one can make WebPages more dynamic by using JavaScript. Hence, the use of CSS and JavaScript makes a webpage more useful and efficient.

B. CSS
CSS stands for ‘Cascading Style Sheet’. They are usually used to format the layout of webpages. They are also employed to define various text styles, table sizes, and other contents of a webpage which could not be defined by using only HTML. The basic idea behind using CSS is to separate the contents of a web document (written in any markup language) from its presentation part. There are many more benefits that one can
extract through CSS such as improves content accessibility, better flexibility, etc. CSS provides a level of control over various presentation characteristics of the document. It helps in reducing the complexity and at the same time makes WebPages effecutual. CSS offers a number of style schemes and rules which one can use as per their need and one can represent a single HTML document in more than one varying styles.

C. 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 World Wide Web. The main purpose of JavaScript is to add various web functionalities, web form validations, browser detections, creating cookies etc. JavaScript is one of the most popular scripting languages and thus it is supported by almost all the web browsers such as Firefox, Opera, Google Chrome etc. JavaScript is considered to be one of the most powerful scripting languages in use today. It is often used for the 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. As the name suggests, JavaScript is influenced by many languages, but mainly Java.

D. PHP

PHP is said to be a very powerful server-side scripting language for developing dynamic web applications. Using PHP, one can build interactive and dynamic websites with ease. PHP script can be embedded straight into the heart of HTML code. PHP is compatible with various web servers like Apache and the Microsoft’s IIS as well. All the PHP scripts are executed on the server and it supports various databases like MySQL, Oracle, Solid, Generic ODBC etc; however, it is mostly used with MySQL.

E. SQL

SQL stands for ‘Structured Query Language’. SQL allows us to access and manipulate databases. SQL is ANSI(American National Standards Institute) standard. SQL is used to perform a number of operations on a database such as execute queries against it, retrieve data from it, insert records into it, update records in it, delete records from it, create new databases, create new tables in it, create stored procedures in it, create views in a database, set permissions on tables, procedures, and views etc.

VI. BENEFITS

- Reduces the Manual Work
- Generate the Staff timetable individually like for each and every staff member
- User Friendly
- Easy notifications about various activities to all the users

VII. CONCLUSION

With all the efforts invested in Information Management System for Faculty and Students, there are reasons to believe that at the end of the project, timed automata technology finds itself a much better shape and moves a bit closer to the industrial acceptance than it were. We summarize the progress with respect to the main objectives of the project, namely, scalability, convenience and accessibility. This project will help the college faculties and students by automating the manual work of uploading files, updating profiles and other ISO Audit related activities. Also it speeds up the performance of activities and provides ease of work. This project can be extended in future by implementing it for all departments over intranet. Also it has a scope for implementation over the internet.

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