



An Implementation Approach for Advanced Management of Examination Section

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Abstract— The objective of the web based Advanced Management of Exam Section is approach of web applications into the computing technology has brought a enormous revolution in our social life including the traditional system of education on examination. Web based Management of Exam Section has a simple and easy to use web-based centralized user interface and a well-defined database-centric schema for cumulating, recouping and managing in examination objects, track records need to maintain information about students as well as faculties .This information could be student name, enrollment, semester, branch, address, faculty name, joining date, faculty qualification etc. or specific information related to departments. Seating Arrangement of students during examinations is distributed and faculties allotment is specified which is maintained in computerized form rather than manually. In existing system Exam Section Management in colleges are maintained manually which trifle more time and no safeguard of data is provided. To overcome this, a system is proffered 'Web Based Advanced Exam Section Management'.

Index Terms— Admin, Official Clerk, Faculty. (Key words)

I. INTRODUCTION

Management of Examination Section is an executive suite which provides a simple interface for alimentation of student as well as faculties details. It can be utilized by any educational institutes or colleges to maintain and sustain the records of students and faculties easily .This information could be student name, enrollment, semester, branch, address, performance, attendance etc. or faculties name, qualification joining date etc. or specific information according to their departments.

The main servitude of Exam Section in any educational institutes is to conduct examinations according to the procedure established for the academic year and course programae concerned .In examination section authoritative faculties is potential senior as works are done very confidentially in this section. All examination material, question papers, answer book and other reformat are received from university. Before examination conduction, room wise sitting arrangement is planned. Invigilator or faculties are allotted duties in different rooms. All this work is done manually.

Invigilators issue question papers to the candidates at the appointed time. Unused question papers are returned to the University. The Candidates write the examinations on the Answer sheets provided by the Examination Centre's. At the end .The invigilators collect the answer booklets from all the candidates at the end of the examination. The institutes then arrange the answer booklets course wise, subject wise, branch wise etc. and send to the concerned University.

It maintain all the details of student from the day one to the end of the course which can be used for all reporting purpose, proper attendance, completed semesters, years, exam details, project or any other assignment details, all semester exam result and all these will be available through secure, and well maintained by the exam section coordinators.

II. PROBLEM ANALYSIS

Mostly, in college's students records are managed and maintained heavily on papers. While paper records are a traditional way of managing student data there are several drawbacks to this method. May be sometimes proper details of class rooms like benches available in class room, in which floor, class room number may not be known by members of exam section. Details may be not in proper format or arrange way. Following are the some problems in existing system.

- In the existing system the student, faculties' details are done only hand-operated.
- Safeguarding of data is tough.
- More manual work and functioning.
- Time squandering.
- Large volume of documentation required.
- Needs manual estimation.
- No command of the higher legitimate.

III. METHODOLOGY OF PROPOSED METHOD

System Design is process of exemplifies the architecture, component, Modules, interfaces and data for a system to satisfy specified requirements. This part will deal with complete information about data flow diagram, detailed flow graph and the design process of the front and back end design of the Advanced Exam Section Management System.

A. DATAFLOW DIAGRAM

A Data Flow Diagram (DFD) is a graphical representation of the "flow" of Student Information System. A data flow diagram can also be used for the visualization of Data Processing^[1]. A Data Flow Diagram (DFD) is a diagram that describes the flow of data and the processes that change or transform data throughout a system. It's a structured analysis and design tool that can be used for flowcharting in place of, or in association with, information oriented and process oriented system flowcharts. When analysts prepare the Data Flow Diagram, they specify the user needs at a level of detail that virtually determines the information flow into and out of the system and the required data resources. This network is constructed by using a set of symbols that do not imply a physical implementation. The Data Flow Diagram reviews the current physical system, prepares input and output specification, specifies the implementation plan etc.

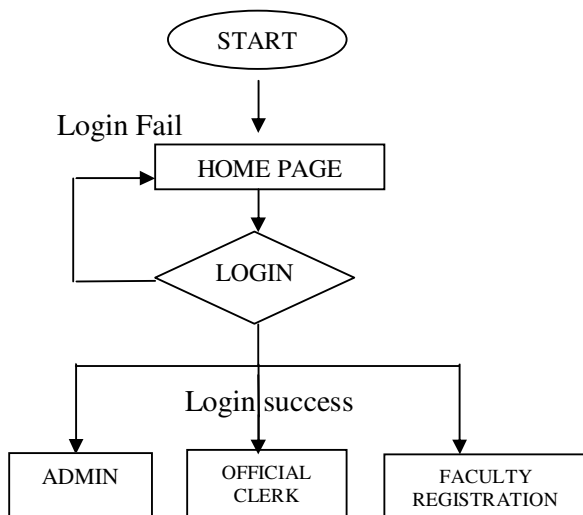


Fig.1 DFD of Management of Examination Section

B.DETAILED DIAGRAM

Detailed of the diagram is concerned with details of the implementation procedures to process the algorithms, data structures and interaction between the modules and data structures.

- **ADMINISTRATOR:** The administrator has the topmost level of power in the exam section management system. The Administrator will be provided more powers (enable/disable/ update) than other users. It will be confirmed and checkup that the information entered is in the correct format. It will provide a unique Id and password to faculties and official clerk. It will allot duties to faculties. The administrator has the full-fledged rights over the entire software. Admin can create/delete an account, also can change the password. Admin can hide any kind of features from users. Insert/delete/edit the information of available on Software can be done by admin.

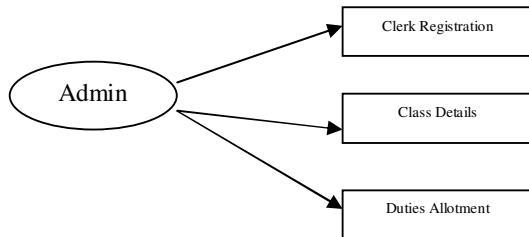


Fig.2 Detailed Flow Diagram of Admin

- **OFFICIAL CLERK:** The official clerk is responsible for entering the new student's details and maintaining the records in proper order. The main responsibility of official clerk is to manage the sitting arrangement of students in class and allotment of duties to faculties in particular class for examination held in colleges. The official clerk is responsible for updating internal and external examination time table of college. They are also responsible for the updating the list for the Faculty and class room allocation for the student's examination.

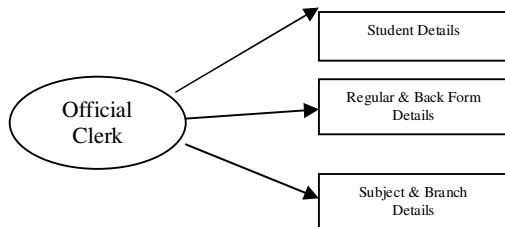


Fig.3 Detailed Flow Diagram of Official Clerk

- **FACULTY:** The faculty can feed his own details and also update the information regarding the qualification, email address, mobile no etc. Student details can be viewed by faculties for better understanding the student performance and improving the efficiency of the student. They can also get the notifications or messages from official clerk like duty allotment in class, timing for arriving, in which shift etc.

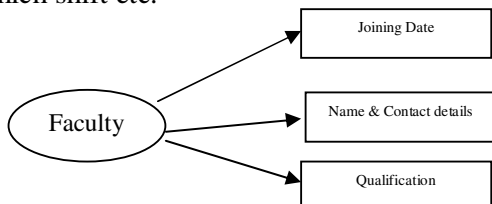


Fig.4 Detailed Flow Diagram of Faculty

C.DATABASE PROCESS DESIGN

Database Management System (DBMS) is a group or cluster of programs that allows users to create and maintain a Database. DBMS is a general –purpose software system that Facilitates the process of defining, constructing, Manipulating, and sharing database among various users and Applications ^[2].

Manipulating a database involves functions such as Querying the database to recover specific data, updating the Database, delete the database and generating reports From the data. Sharing a database grant a multiple users and Programs to access the database synchronously.

Application program accesses the database by sending Queries or request for data to the DBMS ^[3]. It uses the services of the computer’s operating system. Application Program accesses the database by sending queries or request for data to the DBMS ^[3].

IV. MPLEMENTATION

The proffered system is named as “Web based Advanced Management Examination Section” where all manual or paper work is done in computerized formed. This a step ahead to show that web based examination section management are much easier to conduct exams, cheapen the paper work and evaluation will be faster.

In this proposed system, the main task is to deflate the paper work and to provide high security to data. Three modules are used Admin, Official Clerk and Faculty. Each have their different tasks, functions and responsibility. The highest priority is given to the admin.

Contra distinct reports and queries can be engendered based on vast options related to students, batch, course, faculty, exams, semesters and certification and even for the entire college.

All data is stored securely on SQL servers guided by the college administrator and ensures highest possible level of security. The system increase the efficiency of the college’s record management there by reducing the work hours needed to enter the student’s exam details and in planning the sitting arrangement for conducting the examinations.

The aim of proposed system is to develop a system of improved facilities. The proposed system can overcome all the drawback of the existing system. The system provides proper security and reduces the hand operated work.

- Safeguard of data.
- Assure data efficiency.
- Felicitous control of the higher officials.
- Minimize manual data entry.
- Minimum time needed for the various processing.
- Greater accuracy.
- Prominent service.

V. TECHNOLOGIES USED

A.HTML

HTML or Hypertext Markup Language is the standard markup language used to create web pages. HTML^[4] is written in form of HTML elements consisting of tags enclosed in angle brackets (like<html>).The purpose of web browser is to read HTML documents and compose them into visible or audible web pages. The browser does not display HTML tags, but uses the tags to interpret the content of the page.

B.CSS

Cascading Style Sheet (CSS) is a style language used for describing of a document written in a markup language. Most it often used to style web pages and interfaces written in HTML and XHTML, the language can be applied to any kind of XML document, including plain XML. It can also be used to allow the web page to display differently depending on the screen size or device on which is being viewed^[4].

C.JAVA SCRIPT

A JavaScript program is a series of statements, which work together, is a particular goal, and are made up of component grammatical elements, such as expressions and operators. As JavaScript is a programming language invented for the web, it is oriented towards the specific needs of the Web page, allowing JavaScript^[4] program to manipulate, modify and react to the web page.

D.PHP

PHP stands for Hypertext Preprocessor. PHP is an HTML-embedded scripting language. The goal of the language is to allow web developers to write dynamically generated pages quickly. PHP^[4] is a server-side scripting language designed for web development but also used as a general purpose programming language. It is a programming language that allows web developers to create dynamic content that interacts with databases. PHP is basically used for developing web based software applications.

E.SQL

SQL stands for Structured Query Language. SQL^[4] can Execute queries against a database, retrieve data from a Database, insert records in a database, update records in a Database, delete records from a database, create new Databases, create new tables in a database, create stored Procedures in a database, create views in a database, set Permissions on tables, procedures, and views.

VI. CONCLUSION

Examination is an equipment to evaluate the knowledge, understanding, appreciating and learning of students. University examinations have stimulating effect on both students and teachers. The intention of Exam Section Management is to supervise the conducting of exams in colleges and institutes. In propound system main advantage is that it reduces the documentation and provides highly intimate environment. Enforcement of this system presents various solutions such as data efficiency and congenial control of higher sanctioned. It also provides greater accurateness, pronounced service and also minimizes manual work and time dissipation.

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