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## STUDENT INFORMATIONMANEGEMENT SYSTEM

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**Abstract :** Student Information Management System provides a simple interface for maintenance of student information. It can be used by educational institutes or colleges to maintain the records of students easily. The creation and management of accurate, up-to-date information regarding a student's academic career is critically important in the university as well as colleges. Student information system deals with all kind of student details, academic related reports, faculty's details, course details and examination resource related details too. It tracks all the details of a student from the day one to the end of the course which can be used for all reporting purpose, tracking of attendance, exam details, final exam result and all these will be available through a secure, online interface embedded in the website. It will also have faculty details, student details in all aspects, the various academic notifications to the staff and students updated by the college administration. It also facilitate us explore all the activities happening in the institution, and Queries can be generated based on vast options related to students, course, faculty, exams, semesters, and even for the entire institution.

**Keywords—***Student Information System, Database, HTML, SQL..*

### BACKGROUND

The earlier system in institutions used only paper records for managing the student data. While paper records are the traditional way of managing student data and there are several disadvantages to this method. It takes more time to convey the information to the student. Paper records are tedious to manage and track. This system provides a simple interface for the maintenance of student information and examination scores. The system under consideration is prepared in order to replace the current paper record system with an automated online information management system. College staff can directly access all information of a student's academic progress through a secure, online interface embedded in the college's website. The system employee's user authentication, displaying only information necessary for an individual's duties. All data is thoroughly reviewed and verified on the server before actual record alteration occurs.

The design and implementation of a comprehensive student information system and user interface is to replace the current paper records. Student information Management System is web application which is helpful for students as well as the institutions. In the current system all the activities are done manually. It is very time consuming and costly. Our Student Information Management System deals with the various activities related to the students.

In this web application we can register as a faculty as well as a student for every student the authentication code and the roll no is provided by the head of the department faculty and for the registration of a faculty the Registration ID and the authentication code is provided by the administrator the institute. In this project an admin can manage the faculty and take decision about the students like deletion of any student admin is authorized to create the token for the registration of the faculty as same as a faculty is authorized for creating token for the registration of a student.

## 1.1 PURPOSE

The Student Information Management System is to allow the administrator of any organization to edit and find out the personal details of a student and allows the student to keep up to date his profile. It'll also facilitate keeping all the records of students, such as their id, name, mailing address, phone number, DOB etc. So all the information about a student will be available in a few seconds. Overall, it'll make Student Information Management an easier job for the administrator and the student of any organization. Student Information Management System and is intended to help any organization to maintain and manage its student's personal data.

## RESEARCH QUESTIONS

The research questions of this paper are:

- Providing the online interface for students, faculty, administration etc.
- Increasing the efficiency of institution record management.
- Decrease time required to access and deliver student records.
- To make the system more secure.
- Decrease time spent on non-value added task.
- To make the students can apply for the pursuing examinations.

## RELATED TECHNOLOGY

It is a detailed study of the various operations performed by a system and their relationships within and outside of the system. Here the key question is- what all problems exist in the present system? What must be done to solve the problem? Analysis begins when a user or manager begins a study of the program using existing system.

In the current system we need to keep a number of records related to the student and want to enter the details of the student and the marks manually. In this system only the teacher or the school authority views the mark of the student and they want to enter the details of the student. This is time consuming and has much cost.

## 2.1 PROPOSED SYSTEM:

In our proposed system we have the provision for adding the details of the students by themselves. So the overhead of the school authorities and the teachers is become less. Another advantage of the system is that it is very easy to edit the details of the student and delete a student when it found unnecessary. The marks of the student are added in the database and so students can also view the marks whenever they want.

Our proposed system has several advantages

- User friendly interface
- Fast access to database
- Less error
- More Storage Capacity
- Search facility
- Look and Feel Environment
- Quick transaction

All the manual difficulties in managing the student details in a school or college have been rectified by implementing computerization.

## SYSTEM IMPLEMENTATION

Modules of the website are described. It includes software interfaces, hardware interfaces, software requirements, hardware requirements etc. 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.

A. System Development Environment Operating System: Windows 2000 Server (SP4).

Web Server: Xampp server can be used as both the management system Server and the testing platform.

Database Server: Microsoft SQL Server 2000, provides efficient storage process and a flexible user-defined functions to support data integrity control in the core layer.

Client Development Tools: Visual C++ 6.0, creates a userfriendly interface, interacts with card reader and transfers the data with the web server.

### B. System Development Language

#### HTML

HTML is a hypertext markup language which is in reality a backbone of any website.

#### CSS

CSS Stands for "Cascading Style Sheet." Cascading style sheets are used to format the layout of Web pages. They can be used to describe text styles, table sizes, and other features of Web pages that before could only be distinct in a page's HTML

#### JAVA SCRIPT

JavaScript is measured to be one of the most famous scripting languages of all time. JavaScript, by explanation, is a Scripting Language of the World Wide Web.

#### PHP

PHP is a general-purpose scripting language that is especially suited to server-side web development where PHP generally runs on a web server.

#### MySQL

MySQL is a relational database management system (RDBMS) that runs as a server providing multi-user access to a number of databases. MySQL is a popular choice of database for use in web applications and is an open source product.

## APACHE

The Apache HTTP Server is a web server software notable for playing a key role in the initial growth of the World Wide Web.

## XAMPP

XAMPP is a small and light Apache distribution containing the most common web development technologies in a single package.

### C. System Structure

The student registration system is built on C/S mode. The system structure is shown in Figure 1.

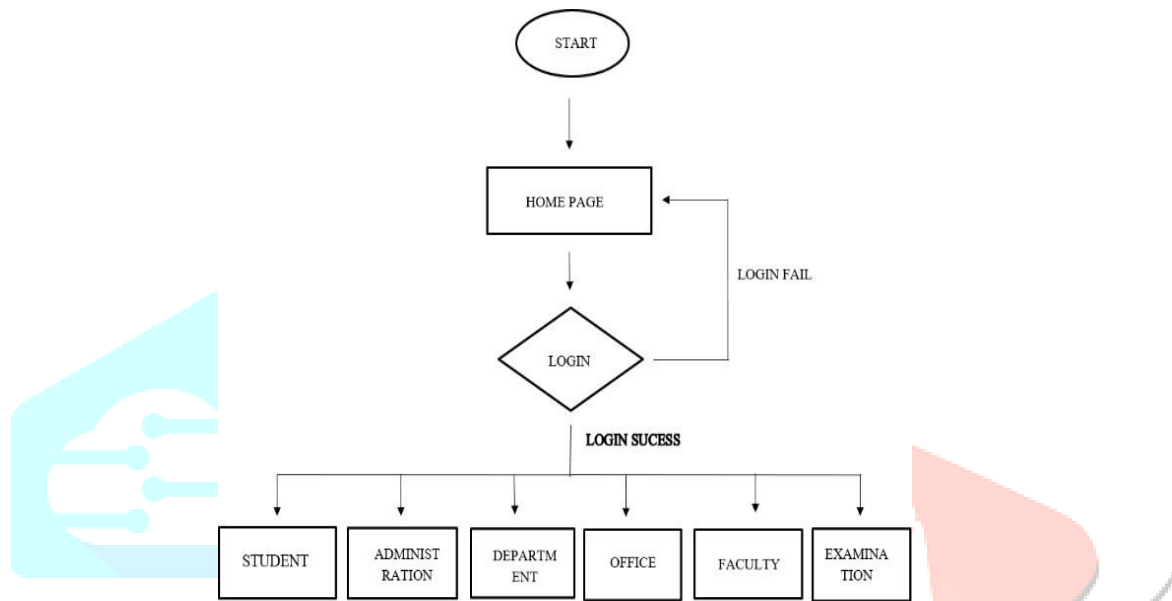


Figure 1 Data flow diagram

### STUDENT MODULE

The student is of middle concentration, because in each college student plays the very significant role. Student can access the info of the college, course details, subject details, faculty details, and exam section information. The course details include info regarding branch he is learning, the academic curriculum of the college, year wise subject offered by the branch, the subject details include the course outline of the subjects, information about the staff managing the subjects, the subjects he currently registered for the semester he is currently studying, attendance and internal marks of the subjects, and about department details including fees information he can also ask any queries to the staff regarding the subjects. The exam section details include the internal and external time tables, it also contains the semester end results.

### 3.1 FACULTY MODULE

The staff can inform the info concerning the student's presence, internal marks of the students and any information regarding the subjects they handle. They can also outlook the student details for better accepting the student performance and educating the effectiveness of the student. The staff likewise gets the updates from the institution. They can also get the notifications from internal exam section.

### 3.2 EXAM MODULE

The examination section is answerable for informing internal and external examination time table. They are also responsible for the updating the students that to filling the present academics subjects with opportunities also for the students having the back papers and includes scheme that students want to apply for the examination. And they are responsible for the checking and approving the internal marks details updated by the staff.

### 3.3 ADMINISTRATOR MODULE

The administrator is answerable for entering the fresh student, promoting the student from one class to alternative class or another, from one semester to another and from one year to another. Handling the student accounts like any changes about to the name, address etc. The administrator also achieves the faulty accounts like entering a new faculty, handover the faculty to the subjects. The administrator also informs the college related info like calendar of events, The administrator will check the all the updates i.e. student updates, faculty updates, exam updates etc. The administrator has the highest level of power in the student information database system.

### 3.4 DEPARTMENT

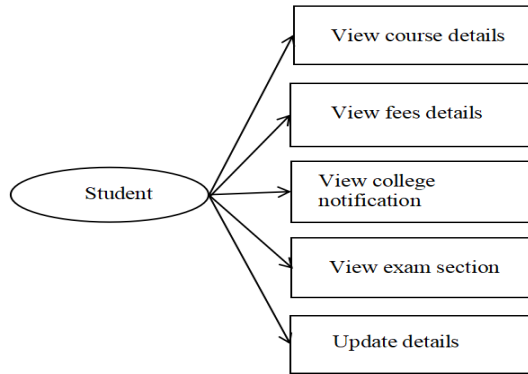
The Department can inform the info concerning the student's presence in the academics, internal marks of the students and any information regarding the subjects and students they handle. They can also outlook the student details for better accepting the student performance and educating the effectiveness of the student. The department likewise gets the updates from the faculty and management. They can also get the notifications from internal exam section and departments contains the student's detailed data.

### 3.1 OFFICE

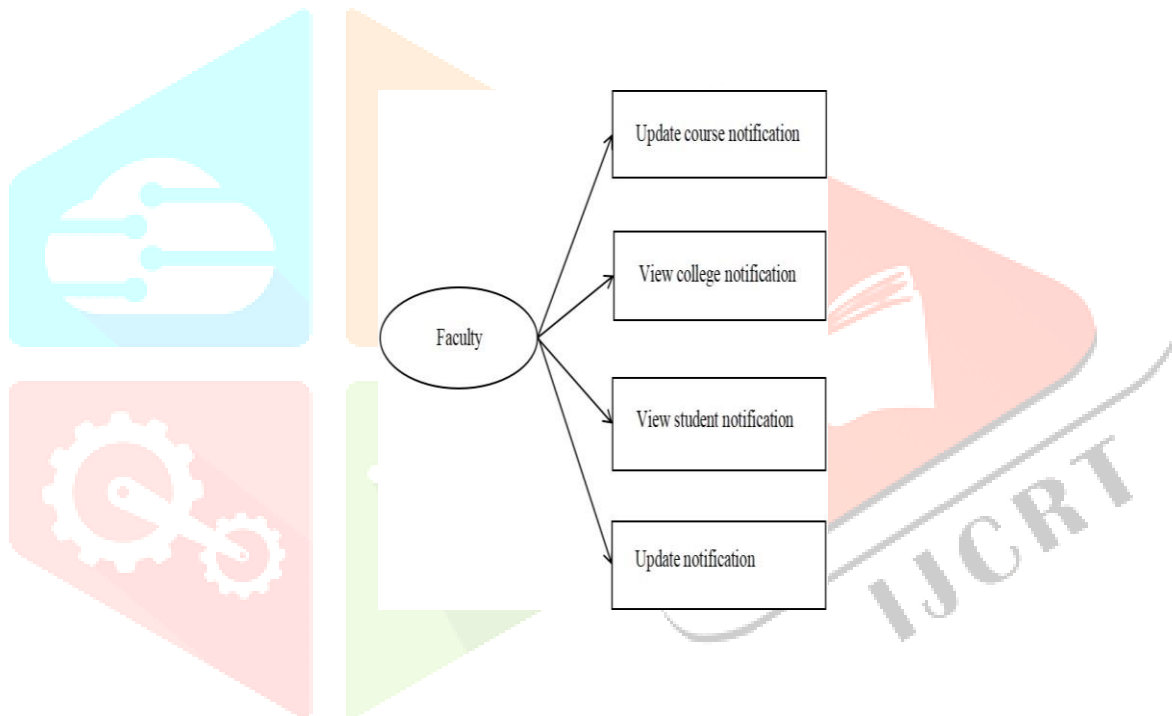
The office manages the info about the student's fees structure and updating the fees of each individual student. And office connects the department that to updating the fees info about the students. Where that helps for the growth of the institute.

4.1 DETAILED DATA FLOW DIAGRAM:

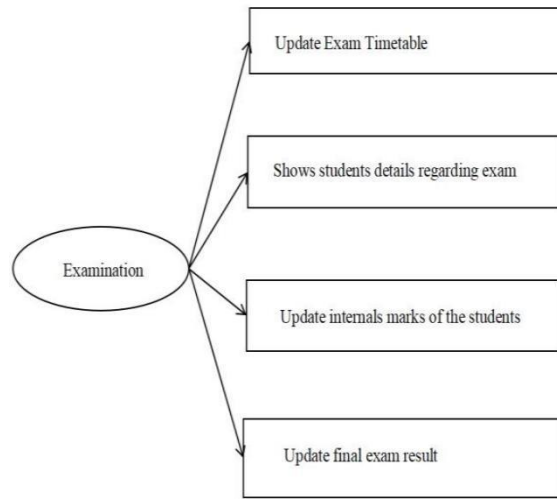
4.11 FLOW DIAGRAM OF STUDENT



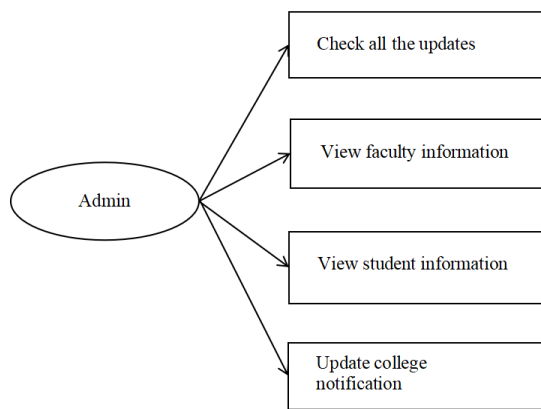
FLOW DIAGRAM OF FACULTY



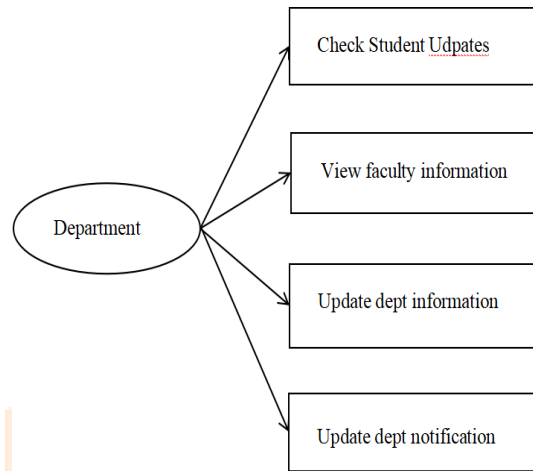
### 4.12 FLOW DIAGRAM OF EXAMINATION



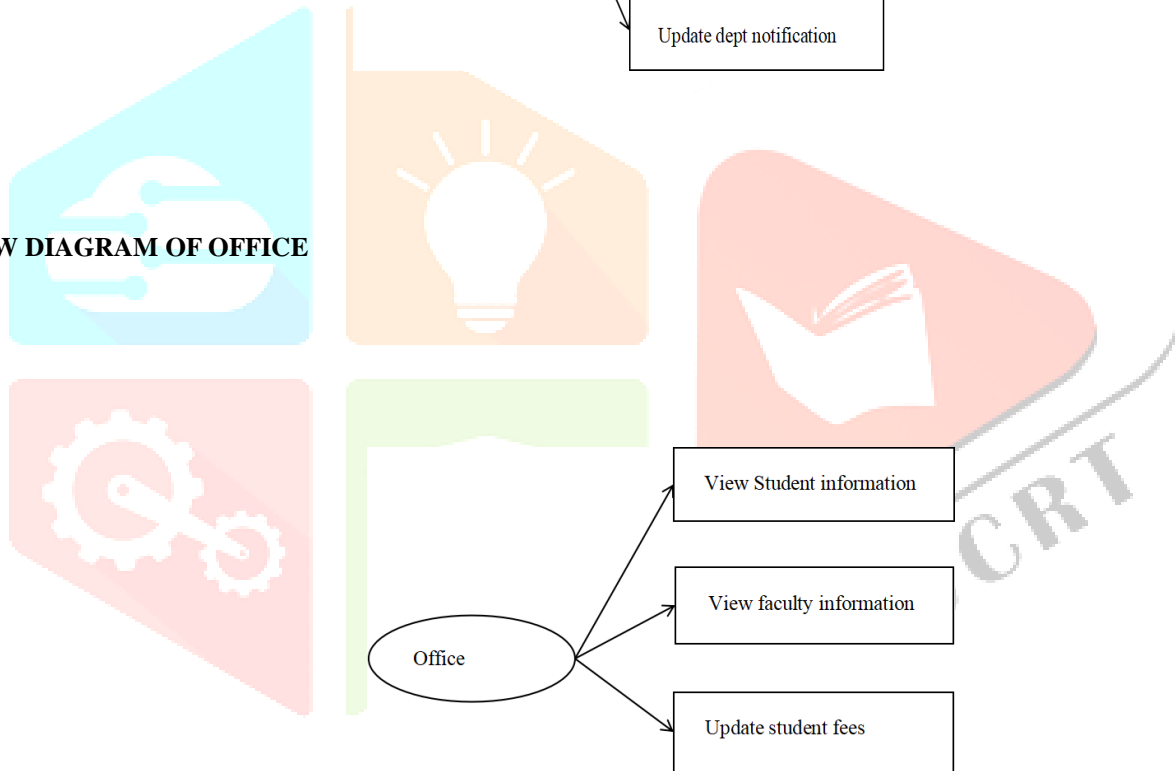
### 4.13 FLOW DIAGRAM OF ADMINISTRATION



#### 4.14 FLOW DIAGRAM OF DEPARTMENT



#### 4.15 FLOW DIAGRAM OF OFFICE



#### 1. FUNCTIONAL REQUIREMENTS:

**Creation of new record:** This function creates a record for a new student.

**Deletion of record:** This function is used to delete the existing record of any student.

**Updation in record:** This function the information in a record of any Student.

**Display of data in record:** This function displays the record of the students.

**Searching a record:** This function searches a particular record.



## 2. NON-FUNCTIONAL REQUIREMENTS:

**Safety Requirements:** The database may get crashed at any certain time due to virus or operating system failure.

**Performance:** Easy tracking of records and updation can be done.

**User Friendly:** The System is very interactive.

**Maintainability:** Backups for database are available.

## SUMMARY AND PROSPECT

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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