



Computer Based Examination Management System with Message Notification Features.

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ABSTRACT

1. Problem Definition

The manual procedure used in educational institutions for exam hall seating arrangement is time consuming and error prone due to human limitations. The purpose of this project is to provide a solution concerning the seating arrangement in educational institutions. Recently most of these educational institutes use manual procedure to assign students writing certain exam in a respective hall. By using manual procedures the institutions were able to keep record of all students, id numbers, exam dates, room numbers. When assigning the students the institutions supposed to determine the capacity of the exam hall and how many students can sit in that exam hall.

I. EXISTING SYSTEM

Existing system is very slow and inefficient. Report generation is also not an easy task in the current situation. Also if the report is generated then calculations are done manually that leads to more errors. There is a lot of manual work involved in current system and mistake in one detail can lead to wrong generation of page. No proper collection of requirements leads a huge problem for this system. This system is to enhance manual work and also more energy is wasted to allocate the seating arrangement.

2.1 Disadvantages of Existing System: -

Current system is manual so all the records are maintained manually. So the seating arrangement of students cannot be determined if updating is not done.

- **Time consuming:** - Every work is done manually so we cannot generate report in the middle of the session or as per the requirement because it is very time consuming.
- **Not User Friendly:** - The existing system is not user friendly because it is not computerized and data is not maintained efficiently.
- **Manual control:** - The generation of report is done manually so there is greater chance of errors.
- **Lots of paperwork:** - Existing system requires lot of paperwork.



II. PROPOSED SYSTEM: -

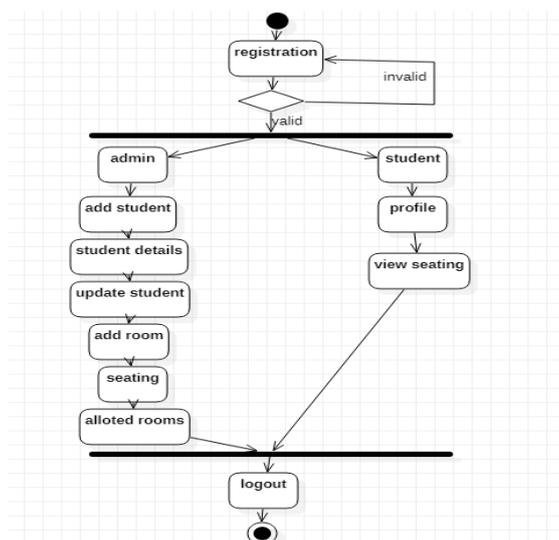
Exam Hall Seating Arrangement System is developed for the college to simplify examination hall allotment and seating arrangement. It facilitates to access the examination information of a particular student in a particular class. The purpose of developing exam hall seating arrangement system is to computerized the traditional way of conducting exams. Another purpose for developing this software is to generate the seating arrangement report automatically during exams at the end of the session or in between the session. The scope of the project is the system on which the software is installed, i.e. the project is developed as a web based application, and it will work for a particular institute. Mostly students are facing many problem for finding the exam hall and their seats respectively .An newly invented concept can aid for the students for checking their exam halls. This helps them to identify the floor or get directions to their respective halls without delays. The Students details have information about all the students who attend the examination .It contains the name of the student, Hall Ticket No, Branch of the student and the hall number. Hall Details have total number of halls available in the institution and the name of the hall.

3.1 Advantages of Proposed System: -

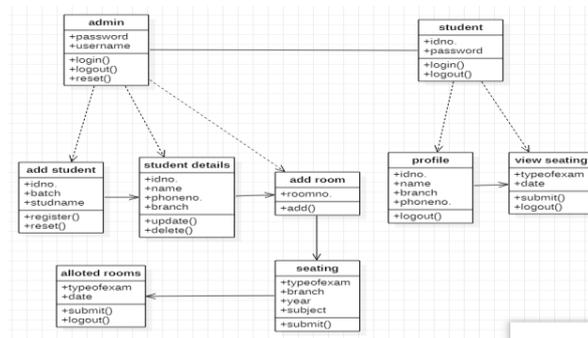
- **User Friendly:** - The proposed system is user friendly because the retrieval and storing of data is fast and data is maintained efficiently. Moreover the graphical user interface is provided in the proposed system, which provides user to deal with the system very easily.
- **Reports are easily generated:** - Reports can be easily generated in the proposed system so user can generate the report as per the requirement.
- **Computer operator control:** - Computer operator control will be there so no chance of errors. Moreover storing and retrieving of information is easy. So work can be done speedily and in time.

III. SOLUTION METHODOLOGY

4.1 Activity Diagram



4.2 Class Diagram: -



IV.SYSTEM IMPLEMENTATION

This project is developed in PHP under Windows platform. In this modern world of computers, every noun of our vocabulary represents a class of objects sharing some set of characteristics and functional traits. PHP leads itself naturally in embodying these areas into its own application domain.

5.1 HTML

HTML, an acronym of Hyper Text Markup Language, is the predominant markup language for web pages. It provides a means to describe the structure of text-based information in a document by denoting certain text as links, headings, paragraphs, lists, and so on and to supplement that text with interactive forms, embedded images, and other objects. HTML is written in the form of tags, surrounded by angle brackets.

HTML can also describe, to some degree, the appearance and semantics of a document, and can include embedded scripting language code (such as JavaScript) which can affect the behavior of Web browsers and other HTML processors. Web pages are built with the help of this HTML which are called the Web Documents.

5.2 Cascading Style Sheets:

Cascading style sheets (CSS) is a style language used to describe the presentation semantics (the look and formatting) of a document written in a markup language. It's most common application is to style web pages written in HTML and XHTML. CSS is a designed primarily to enable the separation of document content (written in HTML or a similar markup language) from document presentation, including elements such as the layout, colors, and fonts. This separation can improve content accessibility, provide more pages to share formatting, and reduce complexity and repetition in the structural content (such as by allowing for table less web design). CSS can also allow the same markup page to be presented in different styles for different rendering methods, such as on-screen in print by voice. A style sheet consists of a list of rules. Each rule-set consists of one or more selectors and a declaration block. A declaration –block consists of a list of declarations in braces. Each declaration itself consists of a property, a colon(:), a value. If there are multiple declarations in a block, a semi colon (;) must be inserted to separate each declaration. In CSS, selectors are used to declare which of the markup elements a style applies to, a kind of match expression. Selectors may apply to all elements of a specific type, or only those elements that match a certain attribute; elements may be matched depending on how they are placed relative to each other in the markup code, or on how they are nested within the Document Object Model.



5.3 CSS Sources:

CSS information can be provided by various sources. CSS style information can be either attached as a separate document or embedded in the HTML document. Multiple style sheets can be imported. Different style can be applied depending on the output device being used; for example, the screen version can be quite different from the printed version, so that authors can tailor the presentation appropriately for each medium.

Priority scheme for CSS sources (from highest to lowest priority): Author styles (provided by the web pages author), in the form of:

- Inline styles, inside the HTML document, style information on a single element, specified using the “style” attribute.
- Embedded style, blocks of CSS information inside the HTML itself.
- External style sheets, i.e., a separate CSS file referenced from the document.

5.3.1 Advantages:

- CSS is used to separate the document presentation from document content written in markup languages.
- Style sheet writers can think about the visual presentation of the document without bothering about the document content.
- CSS reduces development time.
- The size of a document using external style sheet is comparatively smaller and hence, downloaded time is also smaller
- CSS speeds up overall response time.
- CSS provides many more style attributes for defining the look and feel of web pages, than plain HTML.

5.4 MYSQL

MySQL is a fast, easy-to-use RDBMS used for databases on many web sites. Speed was the developer’s main focus from the beginning. In the interest of speed, they made the decision to offer fewer features than their major competitors (for instance, Oracle and Sybase). However, even though MySQL is less full featured than its commercial competitors, it has all the features needed by the large majority of database developers. It’s easier to install and use than its commercial competitors.

MySQL is developed, marketed, and supported by MySQL AB, which is a Swedish company. The company licenses it in two ways:

- **Open source software:** MySQL is available via the GNU GPL (General Public License) for no charge. Anyone who can meet the requirements of the GPL can use the software for free.
- **Commercial license:** MySQL is available with a commercial license for those who prefer it to the GPL. If a developer wants to use MySQL as part of a new software product and wants to sell the new product, rather than



release it under the GPL, the developer needs to purchase a commercial license.

5.4.1 ADVANTAGES OF MySQL:

MySQL is a popular database with Web developers. Its speed and small size make it ideal for a Web site. It is open source, which means free, and we have the foundation of its popularity.

- **It's fast.** The main goal of the folks who developed MySQL was speed. Consequently, the software was designed from the beginning with speed in mind.
- **It's inexpensive.** MySQL is free under the open source GPL license, and the fee for a commercial license is very reasonable.
- **It's easy to use.** We can build and interact with a MySQL database by using a few simple statements in the SQL language, which is the standard language for communicating with RDBMSs.
- **It can run on many operating systems.** MySQL runs on a wide variety of operating systems — Windows, Linux, Mac OS, most varieties of UNIX (including Solaris, AIX, and DEC UNIX), FreeBSD, OS/2, Irix, and others.
- **Technical support is widely available.** A large base of users provides free support via mailing lists. The MySQL developers also participate in the e-mail lists. We can also purchase technical support from MySQL AB for a very small fee.
- **It's secure.** MySQL flexible system of authorization allows some or all database privileges (for example, the privilege to create a database or delete data) to specific users or groups of users. Passwords are encrypted.

5.5. XAMP

XAMP stands for Cross-Platform (X), Apache (A), MySQL (M), PHP (P) and Perl (P). It is a simple, lightweight Apache distribution that makes it extremely easy for developers to create a local web server for testing purposes. Everything you need to set up a web server – server application (Apache), database (MySQL), and scripting language (PHP) – is included in a simple extractable file. XAMP is also cross-platform, which means it works equally well on Linux, Mac and Windows. Since most actual web server deployments use the same components as WAMP, it makes transitioning from a local test server to a live server is extremely easy as well.

5.5.1. What's included In XAMP?

XAMP has four primary components. These are:

- **Apache:** Apache is the actual web server application that processes and delivers web content to a computer. Apache is the most popular web server online, powering nearly 54% of all websites.
- **MySQL:** Every web application, howsoever simple or complicated, requires a database for storing collected data. MySQL, which is open source, is the world's most popular database management system. It powers everything from hobbyist websites to professional platforms like Word Press.
- **PHP:** PHP stands for Hypertext Preprocessor. It is a server-side scripting language that powers some of the most popular websites in the world, including Word Press and Facebook. It is open source, relatively easy to learn, and

works perfectly with MySQL, making it a popular choice for web developers.

- **Perl:** Perl is a high-level, dynamic programming language used extensively in network programming, system admin, etc. Although less popular for web development purposes, Perl has a lot of niche applications.

Different versions of XAMP may have additional components such as php MyAdmin, OpenSSL, etc. to create full-fledged web servers.

V. RESULT



Figure 6.1 HomeScreen

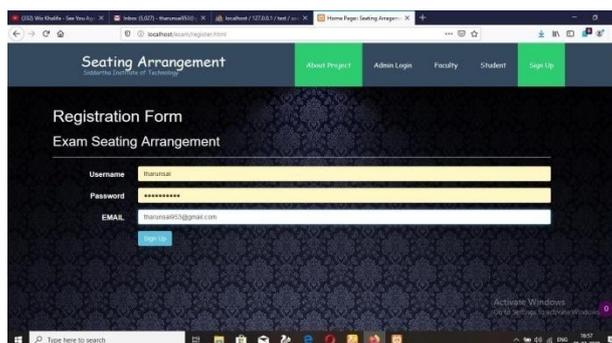


Figure 6.2 Admin signup

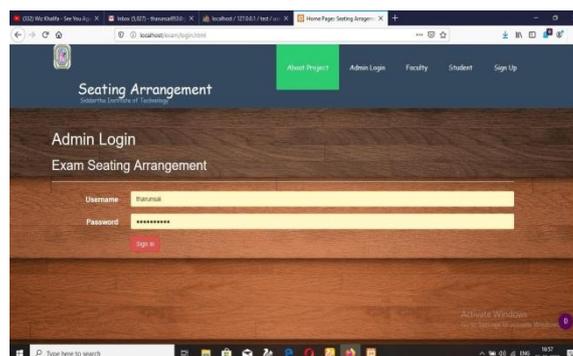


Figure 6.3 Admin login

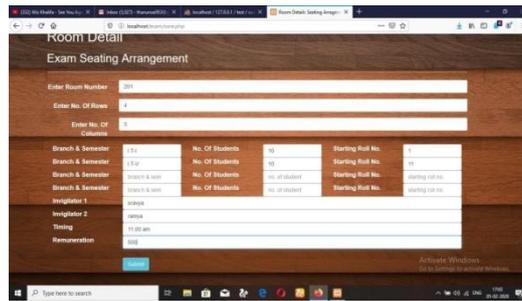


Figure 6.4 Room details

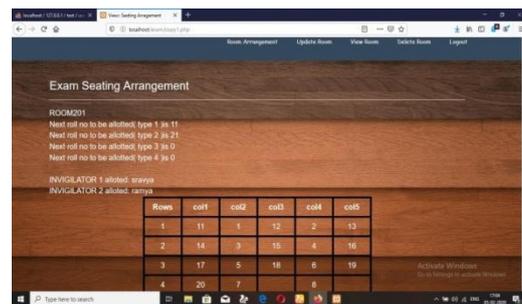


Figure 6.5 Seating Arrangement

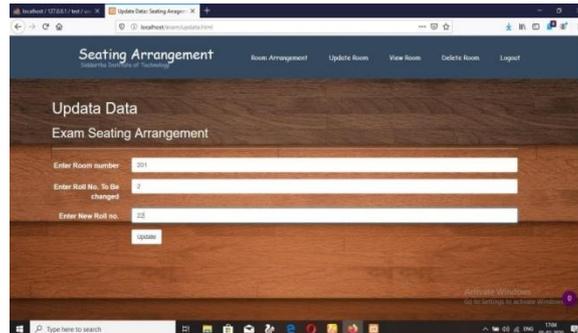


Figure 6.6 Updating data

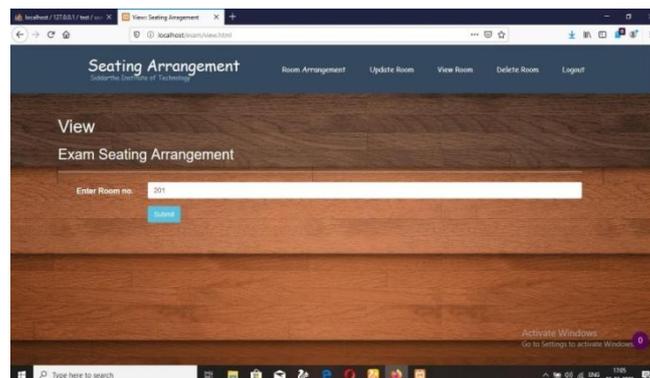


Figure 6.7 View->entering room number



Figure 6.8 View->display

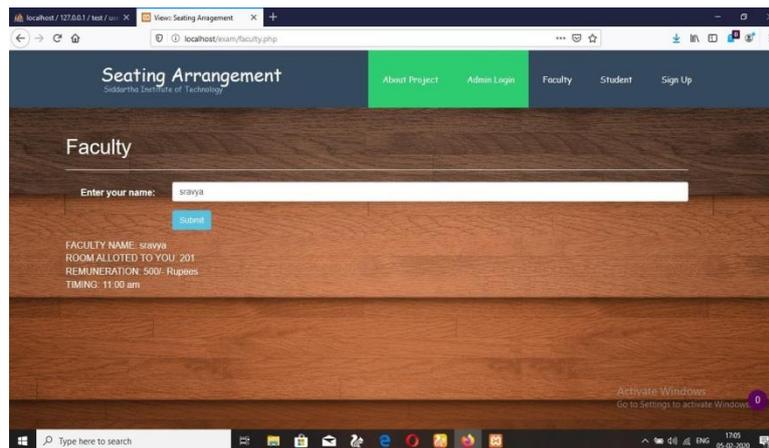


Figure 6.9 Faculty information

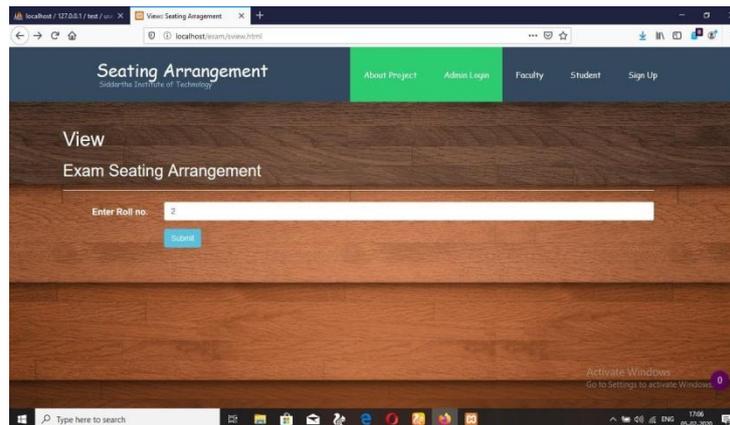


Figure 6.10 Student view

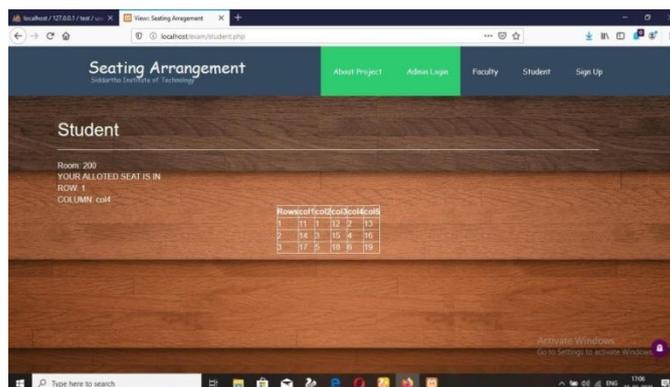


Figure 6.11 View->Student information

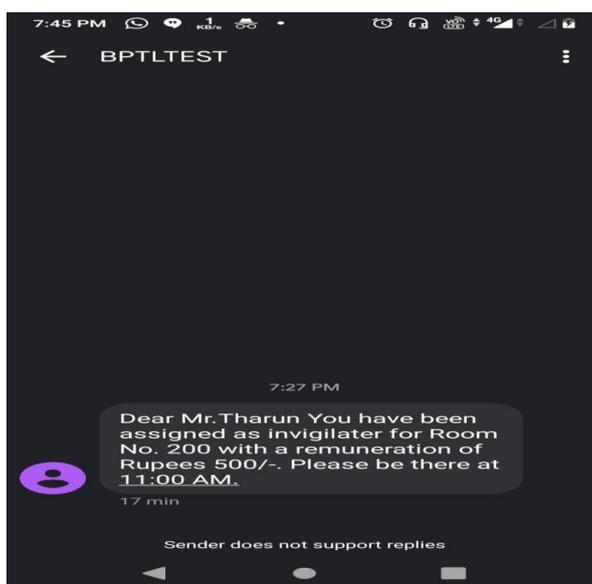


Figure 6.12 Message

VI. WORKING PROCEDURE

7.1 How to Operate the Applications:

- First we need a system having the internet connectivity.
- Enter the website name then it will display the home screen with the pages of about project, admin login, faculty, student and signup.
- The admin has to sign up by entering the user name, password and email-id.
- To enter the details of all the faculty and students the admin has to login.
- When the admin logged into the website he can the information of all the faculty and students.



- Whenever he want to update he just log into the system and update the details of required field.
- When the faculty wants to know the details about the examinations they has to login by using the username and password.
- When the students wants to know the details about the examinations they has to login by using their perspective id's.
- As the faculty details consists of room number allotted on that particular day with timings and the remuneration details.
- Students details consists of the seating arrangement and room number.
- The another major option to this project is sending the message to the faculty regarding their allotment details.

VII. SCOPE FOR FUTURE DEVELOPMENT

We can give more advance software for examination management system including more facilities.

- We can also provide the biometric authentications for the attendance.
- Further we can add more faculty details into the database.
- We can host the platforms on online services to make it access in all over colleges.

VIII. CONCLUSION

This system avoids manual work and the problems concerned with it. Automation of the entire system improves the efficiency It provides a friendly graphical user interface. A web based interface for showing hall name for student is developed, which makes students to see their seat in respective hall easily. A web based interface for analyzing the student academic details is developed. Username and password is created for unique user by register their details in register module. And they can change it by the permission of admin only.

The existing system can be enhanced, by storing the hall ticket into a database, instead of a file so that the statistics about the hall ticket obtained can be easily analyzed. Insert the timetable by entering the time and date for the particular papers and create the seating arrangement. And also database of the exam timetable can be entered by student to view their halls and timing of the exam. By internet, automatically timetable has to fetch to the database and that seating want to be created according to the particular day and session.

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- [6] <https://www.freeprojectz.com/php-mysql-project/exam-seating-management-system>