

# Online Examination System

**Sangeethavani K, Monisha M, Sowmiya R, Sneka. K**

Final Year Students

Nirmala College for Women, Red fields, Coimbatore, TamilNadu, India

**Abstract:** *Our Online examination project contains two categories as Administrator and User. In the administrator role, he/she can add, edit, view, and delete the questions and can have control over permissions for the user to attend the online examination. Questions are shown to the users after they enroll in their account and rules and regulation for the online examination is intimated before they attend the Exam. Questions will be displayed to the users only after their enrolment. The rules and regulations will be the timetable of the exam and necessary rules and regulations will be intimated through automated emails prior to their examination. During the examination the question paper will be displayed for a certain period of time which is predefined according to the rules of the exam control section. The online examination system is very useful for faculties/Professors. As in the teaching profession, are responsible for designing question papers. In the conventional method, the examiner writes the question paper on paper, keeps question papers separate from answers, and all this information you have to keep in a locker to avoid unauthorized access. Using the online examination System examiner can create a question paper and everything will be written into a single exam file. Examiners can set the General and Administrator passwords to avoid unauthorized access to your question paper. Every time you start the online examination system, the program shuffles all the questions and selects them randomly from the database, which reduces the chances of memorizing the questions..*

**Keywords:** Online examination.

## I. INTRODUCTION

### About PHP

PHP is a powerful server-side scripting language for creating dynamic and interactive websites. PHP is widely used; a free and efficient alternative to competitors such as Microsoft's ASP. PHP is perfectly suited for Web development and can be embedded directly into the HTML code. The PHP syntax is similar to pearl and C.

PHP is open-source and is readily available and absolutely free. Stability, flexibility, and speed are chief qualities that attract to choose PHP. PHP have multiple extensions and is extremely scalable.

### Server-side scripting

This server-side scripting is the most traditional and main target field for PHP. The programmer needs three things to make this work. The programmer needs to run the web server, with a connected PHP installation. The programmer can access the PHP program output with a web browser, viewing the PHO page through the server. All these can run on your home machine if programmers are just experimenting with PHP programming.

### Command-line scripting

A programmer can make a PHP script to run it without any server or browser. Programmers only need the PHP parser to use it this way. This type of usage is ideal for scripts regularly executed using cron (on \*nix or Linux) or Task Scheduler (on Windows). These scripts can also be used for simple text processing tasks.

### Features of PHP

- PHP runs on different platforms (Windows, Linux, UNIX, etc.)
- PHP is compatible with almost all servers used today.
- PHP is free to download from the official PHP resource: [www.php.net](http://www.php.net).

### **About MYSQL**

MYSQL is an open-source relational database management system (RDBMS) that is developed, distributed, and supported by MYSQL AB. MYSQL is a popular choice of database for use in web applications MYSQL can be scaled by deploying it on more powerful hardware, such as a multi-processor server with gigabytes of memory. MYSQL is easy to use, yet extremely powerful, secure, and scalable. And because of its small size and speed, it is the ideal database solution for Web sites.

### **MYSQL is a Database Management System**

A database is a structured collection of data. It may be anything from a simple shopping list to a picture gallery or the vast amount of information in a corporate network. To add, access, and process data stored in a computer database we need a database management system such as an MYSQL server. Since computers are very good at handling a large amount of data, database management system plays a central role in computing.

### **MYSQL is a Relational Database Management System**

A relational database stores separate data in separate tables rather than putting all the data in one big storeroom. This adds speed and flexibility. The SQL part of “MYSQL” stands for “Structured Query Language”. SQL is the most common standardized language used to access databases and is defined by the ANSI/ISO SQL standard. The SQL standard has been evolving since 1986 and several versions exist.

### **MYSQL Software is Open Source**

Open source means that it is possible for anyone to use or modify the software. Anybody can download the MYSQL software using the GPL (GNU General Public License), to define what we may and may not use do with the software.

### **MYSQL Server Works in Client/ Server or Embedded Systems**

The MYSQL database software is a client/server system that consists of a multi-threaded SQL server that supports different backends, several different client programs and libraries, administrative tools and a wide range of Application Programming Interface(APIs). A large amount of contributed MYSQL software is available:

Modern-day websites seem to be relying more and more on compelling the Structured Query Language is a very popular database language, and its standardization makes it easy to store, update and access data. One of the most powerful SQL servers out there is called MYSQL and surprisingly enough, it's free.

Some of the features of MYSQL include: Handling large databases, in the area of 50,000,000+records. No memory leaks. Tested with a commercial memory leakage detector (purify). A privilege and password system which is very flexible and secure, and which allows host-based verification. Passwords are secure since all password traffic when connecting to the server is encrypted.

### **Features of MYSQL**

- **Client/Server Architecture:** MYSQL is a client/server system. There is a database server (MYSQL) and arbitrarily many clients (application programs), which communicate with the server. The clients can run on the same computer as the server or on another computer.
- **SQL Compatibility:** As before said SQL is a standardized language for querying and updating data and for the administration of a database. Through the configuration setting sol-mode we can make the MYSQL server behave for the most part compatibly with various database systems.
- **Stored procedures:** Stored procedures (SPs for short) are generally used to simplify steps such as inserting or deleting a data record.
- **Triggers:** Triggers are SQL commands that are automatically executed by the server in certain database operations INSERT, UPDATE, and DELETE, MYSQL has supported triggers.
- **Replication:** Replication allows the contents of a database to be copied (replicated) onto a number of computers to increase protection against system and to improve the speed of database queries.
- **Platform independence:** MYSQL can be executed under a number of operating systems. The most important

are Apple Macintosh OS X, Linux, Microsoft Windows, and the Unix.

- **Speed:** MYSQL is considered a very fast database program

## **II. SYSTEM ANALYSIS**

### **2.1 Existing System**

Existing system contains the online examination provider testing software only for selected institution. The results will be displayed online after the valuation. This project also check the grammatical errors throughout the online test, this project will help the examiners to conduct the online test in an efficient manner with minimal wastage of time and papers is the main objects.

#### **A. Disadvantages**

- It stores only student's detail.
- Does not have any essay writing software for online.
- Large time used for storing the all details.
- It is very difficult to analyze the exam manually.
- More no of invigilators are required in case of smart knowledge provider.
- Results are not precise as calculation and evaluations are done manually.
- The chances of question paper leakages are more in current system as compared to proposed system. Result processing takes more time as it is done manually.

### **2.2 Proposed System**

The proposed system is specially designed for institutions and minimize the examination process. It used to store the all examination details in the system. The administrator only modify the detail. Full authorization is granted to the administrator or in the institutions. This project contain the two sides for administrator side process and student side process. Administrator process contains the detail about all participant detail for each questions, maintain the selected student list and their mark details. Student side process contain the registration form, login form, aptitude test, essay writing test and technical questions.

#### **A. Advantages**

- Analysis will be very easy in proposed system as it is automated
- Result will be very precise and accurate and will be declared in very short span of time because calculation and evaluations are done by the simulator itself.
- The proposed system is very secure as no chances of leakage of question paper as it is dependent on the administrator only.

## **III. PROJECT DESCRIPTION**

### **3.1 Module Description**

#### **Administrator Login**

In this module the system maintains the administrator login details. Administrator is overall maintaining the login details and examination details etc. They use unique user name and password. Administrator can only access in this module.

#### **Staff Login**

Staff login details are maintain the unique user name and password. staff add the different questions in online which like question id, question name, options, type and category etc. staff login is main module of in this project.

#### **Student Registration**

In this module the system maintains the student registration details. It stores student id and password after registration. Student registration is used to store all all student details in online.

#### **Student login**

Student login details are controlled using unique username and password. It contains login after student registration. The module information is login the each student and enters the ready to answer of online examination system.

#### **Examination**

Students can register the answer for a particular question by select the option given in multiple choice list. This module will also allow the student to appear for the aptitudes, technical, essay writing questions. Though this modules the examination can be submitted.

#### **Result**

In this module the results will be announced. In this student can view their results which are uploaded according to the student register id.

#### **Logout**

Once the exam is over the student can logout from the application of online examination system

### **IV. SYSTEM DESIGN**

#### **4.1 Input Design**

Input design is the process of converting the user-oriented. Input to a computer based format. The goal of the input design is to make the data entry easier, logical and free error. Errors in the input data are controlled by the input design. The quality of the input determines the quality of the system output.

The entire data entry screen is interactive in nature, so that the user can directly enter into data according to the prompted messages. The users are also can directly enter into data according to the prompted messages. The users are also provided with option of selecting an appropriate input from a list of values. This will reduce the number of error, which are otherwise likely to arise if they were to be entered by the user itself.

#### **4.2 Output Design**

Output design is very important concept in the computerized system, without reliable output the user may feel the entire system is unnecessary and avoids using it. The proper output design is important in any system and facilitates effective decision-making. The output design of this system includes various reports.

Computer output is the most important and direct source of information the user. Efficient, intelligible output design should improve the system's relationships with the user and help in decision making. A major form of output is the hardcopy from the printer

#### **4.3 Database Design**

A database should provide integration, Integrity and a data independence table in a database contains information pertaining to a specific entity. To maintain the tables in an effective way, it should be normalized to ensure that the number of tables does not exceed the optimum level unless it is mandatory.

To prevent unauthorized access, security measures have been provided. This may prevent unauthorized persons using data that is private. The normalization techniques have been used to design the table such that the use of all the tables is made easy

### **V. SYSTEM IMPLEMENTATION**

Implementation is the stage in the project where the theoretical design is turned into a working system and is giving confidence on the new system for the users that it will work efficiently and effectively. It involves careful planning, investigation of the current system and its constraints on implementation, design of methods to achieve the change over, an evaluation of change over methods. Apart from planning major task of preparing the implementation are education and training of users. The implementation process begins with preparing a plan for the implementation of the system.

According to this plan, the activities are to be carried out, discussions made regarding the equipment and resources and the additional equipment has to be acquired to implement the new system. In network backup system no additional resources are needed. Implementation is the final and the most important phase. The most critical stage in achieving a successful new system is giving the users confidence that the new system will work and be effective. The system can be implemented only after thorough testing is done and if it is found to be working according to the specification. This method also offers the greatest security since the old system can take over if the errors are found or inability to handle certain type of transactions while using the new system. As the part of system testing we execute the program with the intent of finding errors and missing operations and also a complete verification to determine whether the objectives are met and the user requirements are satisfied. The ultimate aim is quality assurance

#### **VI. CONCLUSION**

The application works according to the restrictions provided in their respective browsers. The application satisfies the Administrator. The speed of the transactions become more enough now. The website creation is the web designing project created for displaying the details about the web portal using the coding languages like Html & Css for designing. The interface are so designed and channeled the admin can never make any mistake while using the application, till the time either they save or cancel the current operation all other operations are blocked. This project has been successfully developed and interpreted and system was developed according to the administrator requirements. The system produces accurate results and it also reduces a lot of overheads, which the manual system faced. The information requirements may still increase

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