Online Examination Portal

Niraj Sunil Bharambe¹, Sanjana Ramesh Bhangale²

¹,²Assistant Professor, Department of Computer Science & Information Technology, Shri D. D. Vispute College of Science, Commerce and Management, Panvel, India

Abstract: The Online Examination Portal is a web application for to take online test in an efficient manner and no time wasting for checking the paper. The main objective of Online Examination Portal is to efficiently evaluate the candidate thoroughly through a fully automated system that not only saves lot of time but also gives fast results. For students they give papers according to their convenience and time and there is no need of using extra thing like paper, pen etc. This can be used in educational institutions as well as in corporate world. It Can be used anywhere any time as it is a web based application (user location doesn’t matter). No restriction that examiner has to be present when the candidate takes the test.

Keywords: Online Examination Portal

1. Introduction

A. Existing System and Disadvantages

The first problem is that there are loads of hard copied documents being generated. This brings us to the age-old discussion of keeping information in the form databases versus keeping the same on sheets of paper. Keeping the information in the form of hard-copied documents leads to the following problems.

B. Drawbacks of Existing System

- **Filling poses a problem**: Filling the documents categorically is a time consuming and tedious exercise.
- **Filtering is not easy**: It becomes hard to filter relevant documents for the irrelevant ones if the count of the same crosses a certain manageable number.
- **Result Processing**: is slow due to paper work and requirement of staff.

2. Proposed System

This Web Application provides facility to conduct online examination worldwide. It saves time as it allows number of students to give the exam at a time and displays the results as the test gets over, so no need to wait for the result. It is automatically generated by the server. Administrator has a privilege to create, modify and delete the test.

Papers and its particular questions. User can register, login and give the test with his specific id, and can see the results as well.

3. System Requirement Specifications

A. System Requirement

- The client used is the web browser (any).
- The application Server used is XAMPP Apache + MariaDB + PHP + Perl. The Database Server used is MYSQL workbench 6.1 CE.
- Hardware Requirements:
  - Processor: CORE i3 &above.
  - RAM : 512MB &Above
  - HardDisc : 2.99GB
  - Monitor : Color Processor Speed: 3.2GHz.

4. Introduction to XAMPP

XAMPP is a free and open-source cross-platform web server solution stack package developed by Apache Friends, consisting mainly of the Apache HTTP Server, MariaDB database, and interpreters for scripts written in the PHP and Perl programming languages. Since most actual web server deployments use the same components as XAMPP, it makes transitioning from a local test server to a live server possible. XAMPP's ease of deployment means a WAMP or LAMP stack can be installed quickly and simply on an operating system by a developer, with the advantage a number of common add-in applications such as Word press and Joomla! Can also be installed with similar ease using Bitnami.

A. Etymology

The term XAMPP is an apparent acronym. However, there is no official acronym expansion specified on the Apache Friends website. Their homepage header reads "XAMPP Apache + MariaDB + PHP + Perl", indicating that this abbreviation is a recursive acronym.

The term can be unofficially broken down as follows:

<table>
<thead>
<tr>
<th>Letter</th>
<th>Meaning</th>
</tr>
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<tbody>
<tr>
<td>X</td>
<td>as an ideographic letter referring to cross-platform</td>
</tr>
<tr>
<td>A</td>
<td>Apache or its expanded form, Apache HTTP Server</td>
</tr>
<tr>
<td>M</td>
<td>MariaDB (formerly: MySQL)</td>
</tr>
<tr>
<td>P</td>
<td>PHP</td>
</tr>
<tr>
<td>P</td>
<td>PERL</td>
</tr>
</tbody>
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5. MySQL Database

- MySQL is a fast, easy-to-use RDBMS being used for many small and big businesses. MySQL is developed,
marketed and supported by MySQL AB, which is a Swedish company. MySQL is becoming so popular because of many good reasons MySQL is released under an open-source license. So you have nothing to pay to use it.

- MySQL is a very powerful program in its own right. It handles a large subset of the functionality of the most expensive and powerful database packages.
- MySQL uses a standard form of the well-known SQL data language.
- MySQL works on many operating systems and with many languages including PHP, PERL, C, C++, JAVA, etc.
- MySQL works very quickly and works well even with large datasets.
- MySQL is very friendly to PHP, the most appreciated language for web development.
- MySQL supports large databases, up to 50 million rows or more in a table. The default file size limit for a table is 4GB, but you can increase this (if your operating system can handle it) to a theoretical limit of 8 million terabytes(TB).
- MySQL is customizable. The open-source GPL license allows programmers to modify the MySQL software to fit their own specific environments.

A. MySQL workbench

MySQL Workbench is a unified visual tool for database architects, developers, and DBAs. MySQL Workbench provides data modeling, SQL development, and comprehensive administration tools for server configuration, user administration, backup, and much more. MySQL Workbench is available on Windows, Linux and Mac OS X.

B. Design

MySQL Workbench enables a DBA, developer, or data architect to visually design, model, generate, and manage databases. It includes everything a data modeler needs for creating complex ER models, forward and reverse engineering, and also delivers key features for performing difficult change management and documentation tasks that normally require much time

6. System analysis

A. Data Flow Diagram

DFD is process modeling tool used during problem of analysis. DFD is graphical representation of data moments, processes & files used in support of information of system.

7. Entity Relationship Diagram

- E-R Model: An E-R model is a detailed logical representation of entity, associations & data element for an organization or business area.
- E_R Diagram: E_R diagram is a graphical representation of E_R model. This model uses three feature to describe data. These are
  1. Entity
  2. Relationship
  3. Attribute
  1. Entity: An entity is person, place, object, event or concept for which system want to store data.
  2. Relationship: It connects entities & represents meaningful dependency between them.

A. Activity Diagram

An activity diagram is a graphical representation of an executed set of procedural system activities and considered a state chart diagram variation. Activity diagrams describe parallel and conditional activities, use cases and system functions at a detailed level.
B. Use Case Diagram

Use case diagrams are usually referred to as behaviour diagrams used to describe a set of actions (use cases) that some system or systems (subject) should or can perform in collaboration with one or more external users of the system (actors).

C. Context Diagram

This diagram represents what are the bounders and scope of On-Line Exam System project. It describes the Main objective of the system and its entities involved.

The context diagram of On-line Exam System.

The Administrator can be done the following:
- Create/delete accounts (add a list of faculty names and list of his student)
- Change password for Faculty/Student
- Create/ delete/update courses (subject).
- Insert/Update Questions

The Student can be done the following:
- Change password.
- Review Questions.
8. Future Enhancements

- In our future we are decided to provide more security to our website which cannot be hack.
- We are aiming to provide some online authentication processes for giving extra security to prevent our website from any type of attack.
- We are deciding our website will automatically generate report card.

9. Conclusion

- The main aim of our project is create a bridge between offline and online exams. We are trying to do the project at best level to satisfy all the end users.
- Reduces paper work due to online examination.
- It also reduces workload and other work relating to examination process. Online examination give result at same time so its time saving process.

References

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