Research Article

A Project on Online MCQ Quiz Application

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I N F O

A B S T R A C T

The goal of the MCQ Quiz Application is to automate the existing manual system using computerized equipment and full-featured computer software to meet their needs, so that their valuable data/information may be stored for a longer period with easy access and manipulation. The necessary software and hardware are readily available and simple to use. The necessary software and hardware are readily available and simple to use. As previously said, the MCQ Quiz Application can lead to an error-free, secure, dependable, rapid management system. It might help the user focus on their other tasks rather than maintaining track of their records. As a result, the company will be able to make better use of its resources. The company can keep computerized records without having to make duplicate entries. That implies you won't be distracted by irrelevant information while still being able to get the information you need. The goal is to automate its current manual system using computerized equipment and full-fledged computer software to meet their needs, so that their valuable data/information can be saved for a longer period with easy access and manipulation. Essentially, the project explains how to manage for good performance and better client services.

Keywords: Quiz, Manual System, MCQ

Introduction

The "MCQ Quiz Application" was created to overcome the flaws in the traditional practice manual system.[1] This software is designed to eliminate or, in some circumstances, mitigate the difficulties that this system now faces. Furthermore, this system is tailored to the company's specific requirements for smooth and efficient operations.[2]

To eliminate data entry errors, the program is kept as simple as feasible. When entering invalid data, it also displays anerror notice. The user does not require any formal knowledge to use this system. As a result, it demonstrates that it is user-friendly. As previously said, the MCQ Quiz Application can lead to an error-free, secure, dependable, rapid management system. It might help the user focus on their other tasks rather than maintaining track of their records. As a result, the company will be able to make better use of its resources. This is intended to aid strategic planning and guarantee that your business has the correct level of knowledge and specifics for your long-term objectives. Our systems also include remote access options for those busy executives who are always on the go, allowing you to manage your staff at any time. These systems will allow you to better manage your resources in the long run[3-6].

Objective

The primary goal of the "Quiz App" is to provide a user-friendly environment for all users while also reducing manual work. In the past, quizzes were administered manually, but thanks to advancements in technology, we can now generate scores and pose questions automatically. The functional requirements include creating users that can login to take the quiz and automatically generate scores and reports, as well as administrative activities such as

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adding, deleting, updating admin privilege users. In this application, the administrator has complete control over all permissions, including specifying the details of the quiz, determining whether the result will be shown to the interviewee, adding questions and answers, assigning marks to each question, as well as setting timers for each quiz and generating reports with scores for each quiz.
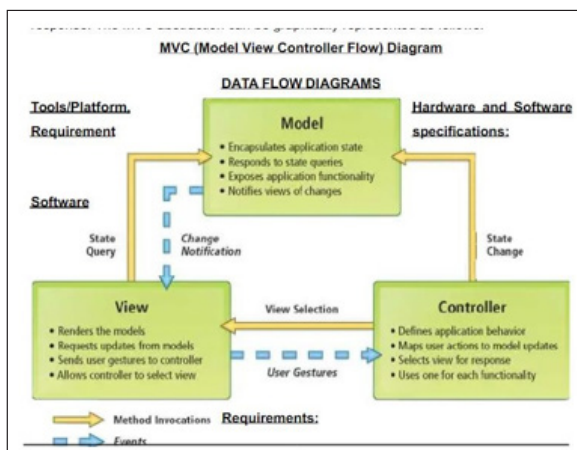

Figure 1.Relational database management system (RDBMS)

Proposed System

An MCQ Application is presented to overcome the limitations of the existing system, which is mostly based onJava. The utilization of mobile technology has changed as Android/Windows devices have gained popularity in the automation of regular tasks in a wireless environment. The examiner's primary goal is to improve a dependable, practical, proper application. A device with the objective to truly provide customer support might be seen as a goal. One of the main goals is to design a device that can handle vast numbers of tests at once and compute the results robotically. One of the most important objectives is to assess its overall performance and acceptability in terms of security, user friendliness, accuracy, consistency. One of the main objectives is to improve communication between management and students.
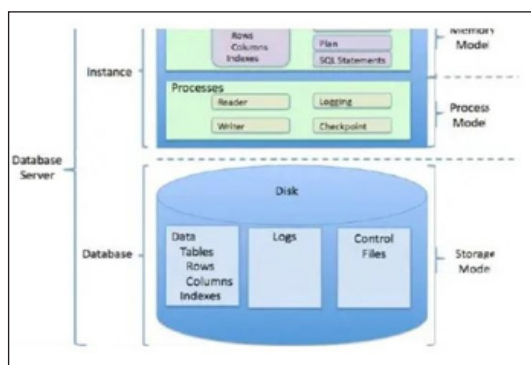

Figure 2.Model view controller flow diagram

Architectural Design

RDBMS (Relational Database Management System): This is an RDBMS-based project in which all transaction statements are currently handled by MySQL. MySQL is a free and open- source relational database management system. A relational database management system (RDBMS) is a database management system (DBMS) based on the relational model, which was developed by IBM's San Jose Research Laboratory's E. F. Codd. The relational database model underpins many of today's most popular databases Figure 1. Since the 1980s, RDBMSS have been the standard for storing data in new databases used for financial records, manufacturing and logistical data, personnel data, much more. Because they are easier to comprehend and use, relational databases have largely supplanted legacy hierarchical and network databases. Relational databases, on the other hand, have been challenged by object databases and XML databases, which were created to overcome the object-relational impedance mismatch in relational databases.

Preliminary Product Description

The exploratory inquiry to establish the system's feasibility is the first step in the system development life cycle. The preliminary investigation's goal is to assess project requests. It is not a design study, it does not include any detail collecting to explain the business system in any way. Rather, gathering information assists committee members in evaluating the merits of the project request and making an informed decision on the project's feasibility.

Working on the preliminary investigation should help you achieve the following goals:

- Ensure that the project request is clear and understandable
- Determine the project's scope
- Evaluate the costs and benefits of different techniques
- Evaluate the technical and operational viability of various options
- Present the findings to management, along with recommendations for whether the plan should be accepted or rejected

Benefit to Organization

Obviously, the firm will reap benefits such as lower operational costs, less paperwork, greater human resource utilization, a more appealing image, all of which will increase goodwill.

The Initial Cost

The cost of hardware software (OS, add-on software, utilities) and labor will be included in the initial cost of setting up the system (setup & maintenance). The organization must face the same burden.

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Running Cost

Aside from the original cost, the long-term cost will include the system's operating costs, which will include the AMC, stationary charges, human resource costs, the cost of updating/renewing various relevant software.

Need for Training

Users and administrators must be trained at the time of system implementation to ensure that the system runs smoothly. The training location will be provided by the client. We spoke with the center's financial management team, the personnel that kept data in many registers, the reporting manager about their current system, their requirements, their expectations from the new suggested system. Then, based on their needs and the additional features they wanted to include in this system, we conducted a system study of the complete system. Without this planned system, obtaining reliable, accurate, secure data was also thought to be a difficult process. Because there was no such record for keeping track of all the activities performed daily by the MCQ Quiz Application. The new system that I planned and then developed will make the organization's job easier. It will assist the employees in producing the necessary reports, which will allow them to track their progress and services.

As a result, it will make management easier because all the essential activities will be digitized through this system.

Results

Our software utility produces application software as a final product. When a user uses it to create a quiz test, the test will appear on the screen with a score at the conclusion Figure 3.

Conclusion

Our project is merely a side project to meet the demands of those who need to manage their project work. Several user-friendly coding systems have also been implemented. This package will prove to be a tremendous tool in meeting all the school's criteria. The goal of software planning is to provide a framework for managers to establish reasonable estimations within a limited time frame at the start of a software project, it should be updated on a regular basis as the project develops.

At the end it is concluded that we have made effort on following points:

A summary of the project's background and context, as well as its relationship to previous work in the field. Made statement of the aims and objectives of the project.

The project's goals and objectives have been stated.

- The purpose, scope, applicability of the documentare all described

- We establish the project's problem
- The requirement is described. The system'sspecifications as well as the activities that can betaken
- We comprehend the problem domain and create a system model that explains the system'so perations
- We in corporated screen layouts as well as features and procedures in detail
- We created the system's user interface as well as security measures

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