**SYNOPSIS**

**Report on**

# Online Quiz Application

**by**

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**Session:2023-2024 (III Semester)**

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(2023 - 2024)

# ABSTRACT

The online quiz application is a web based platform designed to provide users with an engaging and educational experience through a variety of quizzes on different topics. This project aims to create a user friendly, responsive and feature rich application that allows users to participate in quizzes, test their knowledge and track their progress.

This application can be used by students to study for exams, practice new skills, and assess their understanding of course material. Teachers can also use online quiz applications to create and administer quizzes for their students.

One of the main benefits of online quiz applications is their convenience. Users can take quizzes from anywhere with an internet connection, at any time of day or night. This makes them ideal for students who need to study for exams, or for those who need to brush up on their skills.

Another benefit of online quiz application its flexibility. Users can choose to take quizzes on a variety of topics, and they can adjust the difficulty level to suit their needs. This makes them ideal for a wide range of users, from beginners to experts.

The application can also track user’s progress. This feature can be helpful for students who are trying to improve their grades, or for professionals who are working towards a promotion.

Overall, online quiz applications are a versatile and convenient tool for learning and assessment. They can be used by students, teachers, professionals, and anyone else who wants to improve their knowledge and skills.

# TABLE OF CONTENTS

Page Number

1. Introduction 4
2. Literature Review 5
3. Project / Research Objective 6
4. Research Methodology 7
5. Project / Research Outcome 8 - 9
6. Proposed Time Duration 10 -11

References 12

# INTRODUCTION

Online quiz application is a software program that allow users to take quizzes on a variety of topics. This application can be used for educational, entertainment, or professional purposes.

The Application in Python, HTML, CSS, and MySQL is a web-based application that allows the users to add, modify and take quizzes. The system is developed using the Python programming language, HTML for the user interface, CSS for the styling, and MySQL for the database.

Online quiz application typically has a user interface that allows users to browse through a list of quizzes, select a quiz to take, and answer the questions. The application may also provide feedback to the user on their answers and calculate their score

This application has a Admin interface and a teacher interface that will allow to add the courses, teachers to the admin and to add category, students, questions to the teachers

**Technology Used:**

* **Python:** Python is a popular programming language that is known for its simplicity and readability. It is also a very versatile language that can be used for a wide variety of tasks, including web development, data science, and machine learning.
* **HTML, CSS, and MySQL**: HTML, CSS, and MySQL are the core technologies used to develop web applications. HTML is used to create the structure of the web page, CSS is used to style the web page, and MySQL is used to store and manage the data.

# LITERATURE REVIEW

There has been a growing body of research on the effectiveness of online quiz applications for learning. This research has found that online quiz applications can be an effective way to improve student learning, especially when they are used in conjunction with other teaching methods.

One study found that students who used online quiz applications performed better on exams than students who did not use online quiz applications. The study also found that online quiz applications were more effective for students who were less motivated to learn.

Another study found that online quiz applications were effective for improving student learning in a variety of subjects, including mathematics, science, and social studies. The study also found that online quiz applications were more effective for students who were enrolled in online courses than for students who were enrolled in traditional face-to-face courses.

Here is a literature review of some of the most notable open-source online quiz applications

* **Quizizz** is a free online quiz platform that offers a wide variety of quizzes on a variety of topics. Quizizz quizzes can be taken individually or as a class.
* **Kahoot!** is another free online quiz platform that is popular among students and teachers. Kahoot! quizzes are typically interactive and competitive, and they can be taken on a variety of devices.
* **Socrative** is a paid online quiz platform that offers a variety of features, including quizzes, polls, and exit tickets. Socrative is popular among teachers who want to create engaging and interactive lessons.
* **Edmodo** is a free online learning platform that includes a quiz feature. Edmodo quizzes can be used to assess student understanding of course material, or to provide students with practice on a particular topic.

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# PROJECT OBJECTIVE

The online quiz application is a web based platform designed to provide users with an engaging and educational experience through a variety of quizzes on different topics. This project aims to create a user friendly, responsive and feature rich application that allows users to participate in quizzes, test their knowledge and track their progress.

The application will have the following features:

* Admins: Users will be able to create an account in order add the teachers and student accounts
* Quiz Creation: Teacher panel will be able to create the own quizzes This includes the addition of questions, choosing the type of questions and set the time limit and environment of the quiz
* Quiz Taking: The students will be able to take quizzes that have been created by the teachers. Students would be able to review their answers and submit it when it is finished
* Scoring: The application will automatically score quizzes and provide students and teachers with the progress report of the students
* Quiz categories: The application can allow the teachers and the students to add and take various quizzes in different domains
* Timer and Difficulty levels: The teachers will be able to set the timer and difficulty level of the quizzes

In addition to these features, the system should also be:

* Scalable: The system should be able to handle a large volume of data and transactions.
* Secure: The system should protect user data and prevent unauthorized access.
* User-friendly: The system should be easy to use for users of all skill levels.

By developing an inventory management system in Python, HTML, CSS, and MySQL, businesses can improve their efficiency, accuracy, and profitability.

# RESEARCH METHODOLOGY

The research methodology for developing an Online Quiz Application in Python, HTML, CSS, and MySQL can be divided into the following steps:

1. Requirements gathering and analysis: The first step is to gather and analyse the requirements for the system.
2. System design: Once the requirements have been gathered and analysed, the next step is to design the system. This includes designing the database, the user interface, and the system architecture.
3. Database design and development: The next step is to develop the database. This includes creating the database tables and relationships.
4. User interface design and development: The next step is to design and develop the user interface. This includes designing the layout of the screens and the controls that the users will interact with.
5. System integration and testing: Once the database and user interface have been developed, the next step is to integrate the two and test the system. This includes testing the system to ensure that it meets all of the requirements and that it is free of errors.
6. Deployment and training: The final step is to deploy the system and train the users on how to use it. This includes installing the system on the production server and providing training to the users on how to use the system.

**Referring to the above steps, we will develop the following modules:**

1. **Login Page**
2. **Admin Panel**
   1. **Course Addition**
   2. **Teacher Addition**
3. **Teacher Panel** 
   1. **Student Addition**
   2. **Category Addition**
   3. **Question Addition** 
      1. **Timer Setting**
      2. **Difficulty Setting**
4. **Student Panel** 
   1. **Category Selection**
   2. **Quiz Taking**
   3. **Performance Analysis**

# PROJECT OUTCOME

The project outcome for an online quiz application can be measured in a variety of ways, depending on the specific goals of the application. Some common project outcomes for online quiz applications include:

* **Improved learning outcomes:** Online quiz applications can be used to improve student learning outcomes in a variety of ways. For example, online quiz applications can be used to assess student understanding of course material, to provide students with feedback on their learning, and to help students to identify areas where they need additional suppor**t.**
* **Increased motivation and engagement:** Online quiz applications can be used to increase student motivation and engagement with learning. For example, online quiz applications can be used to create a competitive environment, to provide students with immediate feedback on their performance, and to reward students for their achievements.
* **Reduced workload for teachers:** Online quiz applications can be used to reduce the workload for teachers. For example, online quiz applications can be used to create and administer quizzes, to grade quizzes automatically, and to provide students with feedback on their performance.
* **Improved data collection and analysis:** Online quiz applications can be used to collect and analyze data on student learning. This data can be used to identify areas where students need additional support, to track student progress over time, and to improve the design of the quiz application.

In addition to these general project outcomes, online quiz applications can also be used to achieve specific goals, such as:

* **Preparing students for standardized tests:** Online quiz applications can be used to prepare students for standardized tests, such as the SAT or ACT.
* **Onboarding new employees**: Online quiz applications can be used to onboard new employees by providing them with information about the company and its products or services.
* **Assessing employee skills:** Online quiz applications can be used to assess the skills of employees, such as their knowledge of company policies or their proficiency in a particular software program.
* The specific project outcome for an online quiz application will depend on the specific goals of the application. However, all online quiz applications should be designed to be user-friendly, engaging, and effective for learning and assessment.

# PROPOSED TIME DURATION

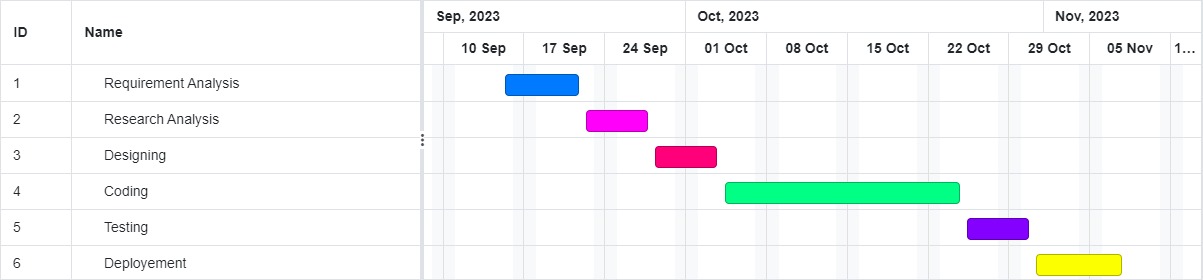
The proposed time duration for developing an inventory management system in Python, HTML, CSS, and MySQL can vary depending on a number of factors, including:

* The complexity of the system
* The size and experience of the development team
* The resources available to the development team

However, a typical time duration for developing a basic inventory management system using these technologies would be around 6-8 weeks. This would include the following steps:

* Requirements gathering and analysis: 1-2 weeks
* System design: 1 week
* Database design and development: 1-2 weeks
* User interface design and development: 1-2 weeks
* System integration and testing: 1-2 weeks
* Deployment and training: 1 week

It is important to note that this is just a typical time duration and the actual time required to develop the system may vary depending on the factors mentioned above.



# REFERENCES

Here are some references for developing an inventory management system in Python, HTML, CSS, and MySQL:

* Python:
  + Python Tutorial: https://docs.python.org/3/tutorial/
  + Python Documentation: https://docs.python.org/
  + Python Flask Framework: https://pythonbasics.org/what-is-flask-python/)
* HTML, CSS, and MySQL:
  + HTML Tutorial: https://www.w3schools.com/html/
  + CSS Tutorial: https://www.w3schools.com/css/
  + MySQL Tutorial: https://www.w3schools.com/MySQL/default.asp
* Online Quiz Application
* Kahoot : <https://kahoot.it/>
* Quizit: <https://quizit.online/>