

Android Based Quiz Application

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Abstract

The Electronic Devices have changed our day to day life to Online Remote Workflow and reduced dependences on In-Person Workflow. In this way we have developed a quiz application which is used to conduct MCQ tests in the advanced method. Android Mobiles has hardware and software that allows faster and stable execution of android applications. Our paper focuses on the development of Android based MCQ Examination Platform. It allows the users to analyze their skills and knowledge through different sets of quizzes and increase their learning abilities and Perform well in any kind of examination.

Keywords: Android, MCQ , IDE , Quiz , App , Electronic Devices .

I. Introduction

The quiz application helps to conduct the mcq test in various domains of their choice. First the user needs to login using their email and password as a login credential. If New user joins the application then the sign up process should be executed in which the user needs to give Name, Designation , Phone Number , Email Id and Password. After that login access the content of the application. The Instruction window will be shown and then we can choose the domain of our choice and take mcq test with timer. User with the highest score will get some rewards .After a further enhancement in the quiz app can be used for the selection process for the aspirants which will save efforts and time and eliminate unwanted candidates to appear for Interviews.

II. Literature Survey

Android studio provides an unified environment where we can build apps for android phones, tablets. It's really getting famous and the number of users are increasing day by day as it gives the best user experience. Android studio provides a fast and feature-rich emulator for app testing.

An Application Programming Interface architecture reduces the requirement of time and memory for development of app. Android is an open source and LINUX-based package for mobile devices and smartphones. Android was developed by developed by open Handset Alliance led by Google and other companies. Quiz app is built using java. Java has extensive set of libraries that reduces the total cost of developing applications and speed the procedure. For the design of web page including color, layout and background images CSS is used. It allows the usage of app in small as well large screens that will be very useful for the users from anywhere.

III. Hardware & Software

- USB cable
- Android mobile
- Connecting wires
- Android studio
- Emulator



Fig 1 : Connecting Wires

IV. Advantages of Android Studio



Fig 2: Android Logo

- 1) Everything you need to build on Android.
- 2) Code and iterate faster than ever.
- 3) Fast and feature-rich emulator.
- 4) Code with confidence.
- 5) Testing tools and frameworks.
- 6) Configure builds without limits.
- 7) Optimized for all Android devices.
- 8) Create rich and connected apps.
- 9) Android applications are scripted in Java language with the help of a rich set of libraries.
- 10) It is currently used in various devices such as mobiles, tablets, televisions, etc.
- 11) Android provides a rich application framework that allows us to build innovative apps and games for mobile devices in a Java language environment.
- 12) Pre- Build Templates Available.
- 13) Android Studio offers build automation, dependency.

V. Proposed Work

- In this application, the new user wants to sign up by giving their Electronic Mail id and enroll into the quiz.
- Existing users take the quiz by logging into their account.

- Before starting the quiz, the instruction window to attempt the quiz will be displayed.
- After reading the instructions, users will be allowed to attend the quiz.
- Users can see whether each answer is correct or incorrect and also the correct answer will be displayed.
- After completing the quiz, users can get the credit score for each of their correct answers.
- If the user scores a high score in the quiz, he will be in the top of the leaderboard. A coin will be issued to him so that he could get additional time in another quiz.
- If a user faces an issue while attending the quiz, immediately he can post queries related to the issue, so that the admin resolves the query immediately. It will be a user friendly experience to the user of the Mobile Application.

VI. Workflow

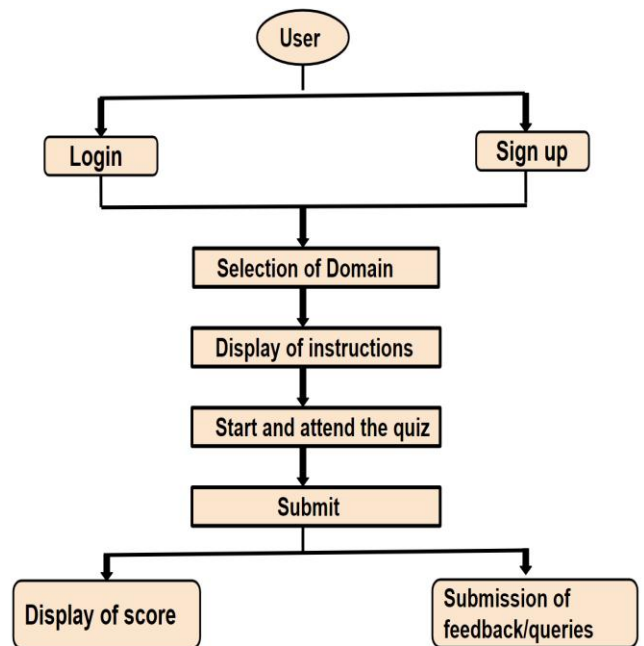


Fig 3: Workflow

VII. Use-Cases

a) Gaming

Organization conducts a quiz with fun for learning and welfare of student. Conducting quiz in online mode is more effective than manual mode which reduces strain of an organizer. The creator is able to set a timer for the whole quiz or to set a timer per question. This is possible to do with written quizzes, but is very time consuming for the instructor. More number of participants are unable to participate in offline mode, it needs more accommodation. Taking online quizzes makes it possible to have a large number of participants through remote locations.

b) Education

By taking a quiz, students can do critical thinking, and they can learn through innovation. These quizzes follow the learning process which helps students to understand their weaker areas of learning with instant feedback. Students can improve their learning by attending the quiz. After the submission of the quiz they can get the scores and can also check the correct answers. Re-attempting the quiz is also possible and students can achieve a good score.



Fig 4: Digital Education

c) E-commerce

In many e-commerce platforms like amazon, flipkart, snapdeal, myntra quizzes are available on demand basis. They can attend the quiz and if we are eligible for unlocking rewards offers based on their scores. This attracts the customers to purchase more items in that platform and avail discounts.



Fig 5 : E Commerce

VIII. Benefits of the system

1. It is a time saving process. It frees students from taking pen and paper.
2. This system enables students from any part of the world to take the quiz from a mobile app.
3. Teachers can also conduct quizzes anywhere as well as anytime.
4. This software generates an accurate result in less than a minute.
5. Score board will be displayed with a correct answer and grades will be given for their scores.
6. It will be cost effective as everyone can attend their quiz in an online mode as it reduces manual work.
7. Timer can be set to the quiz and by scoring the highest score additional time will be given.

IX. Conclusion

Quiz App is very important in future learning systems, it can be easily adopted by educational institutions and other e-commerce platforms in order to make quizzes more easier and flexible. It will be the best virtual mode platform for taking the quiz. Usage of Android studio provides a flexible user interface for the customers and students.

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