

An Android base Road Safety Application Report

on

“MCQApp”

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by

1) Saloni Parekh (SE-10 23251)

2) Muskaan Shraogi (SE-10 23255)

3) Shreyas Kalrao (SE-10 23256)

4) Tanmay Pardeshi (SE-10 23260)

Under the guidance of

Prof. K. Y. Digholkar

Prof. R. R. Chhajed



Department Of Information Technology

Pune Institute of Computer Technology College of Engineering

Sr. No 27, Pune-Satara Road, Dhankawadi, Pune - 411 043.

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1. ABSTRACT

This project 'MCQApp' has been made to assist applicants applying for the online Learner's License Test. The app has a set of thirty carefully chosen questions with three difficulty levels- Easy, Medium and Difficult.

It has been made using **Android Studio**- the official integrated development environment for Google's Android operating system, designed specifically for Android development. The questions are brought to the app by its connection to the Firebase. **Firebase** is a cloud hosted database that supports multiple platforms Android, iOS and Web. All the data is stored in JSON format and any changes in data, reflects immediately by performing a sync across all the platforms & devices.

This app can be used by anyone who aspires to pass the Learner's License Test to obtain their final Driver's License.

2. INTRODUCTION

The MCQApp is a bank of all those questions that have been asked often in the Learner's License Test. On opening the app, you will be taken directly to the first question of the Easy level. The Easy level consists of 10 questions. If more than half are attempted correctly in this level, you will be shown the next set of questions from level Medium. On completing these question, if more than half are attempted correctly, again, you will finally see the final level questions. This marking scheme may be different from the actual test, but this app aims to enhance your skills so you may pass the real test with the best of marks.

3. NEED & MOTIVATION

- 1.** To establish a familiarity between the applicant and the questions.
- 2.** To develop a platform to find all questions in one place.
- 3.** To develop a competitive atmosphere for the applicant.

4. LITERATURE SURVEY

a. User of Application

The users vary from all ages between 18 to 60, most of which struggle to use laptops or computers to come across sites which have a database of questions. The users preferred a one-click-app that would be easy to use and would solve the purpose.

b. Available Applications.

It has been noticed that there are a lot of sites or apps that provide the questions that are necessary for the study of the real test. But the problem that most users seem to come across is that either there are too many or too less questions. These questions may not always be accessible to everyone and solving a huge number of questions gets too monotonous and boring for the customers.

5. SCOPE OF APPLICATION

The scope of the application is to provide a simple and attractive interface to help those applying for the Learner's License Test. In this application, the users get a hands on experience with the questions and are thus, comfortable in appearing for the real test.

6. SOFTWARE / HARDWARE REQUIREMENTS

To Build:

- A laptop with Android Studio
- A smart phone with the Android Operating System.

To use:

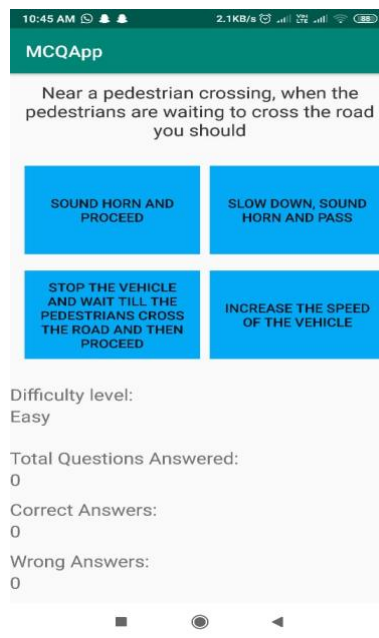
- A smart phone with the Android Operating System

7. GRAPHICAL USER INTERFACE

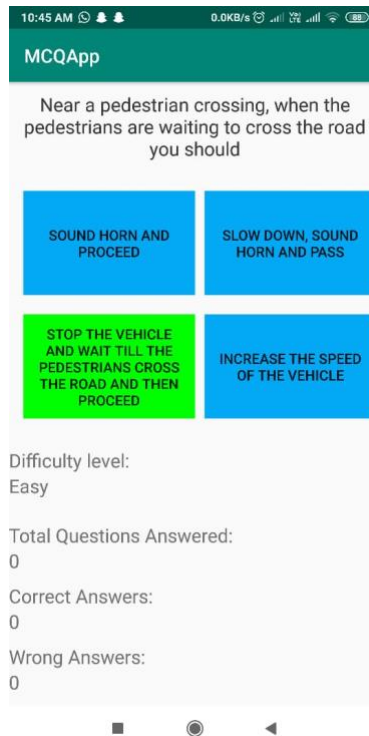
Features

1. Clean separation of various components to facilitate easy modification and revision.
2. Quick and easy saving and loading of database file.

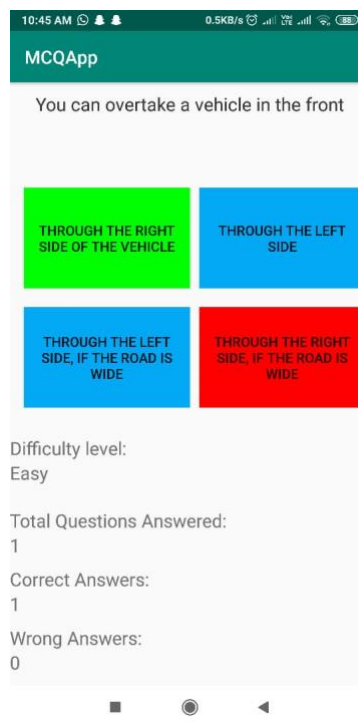
SNAPSHOTS



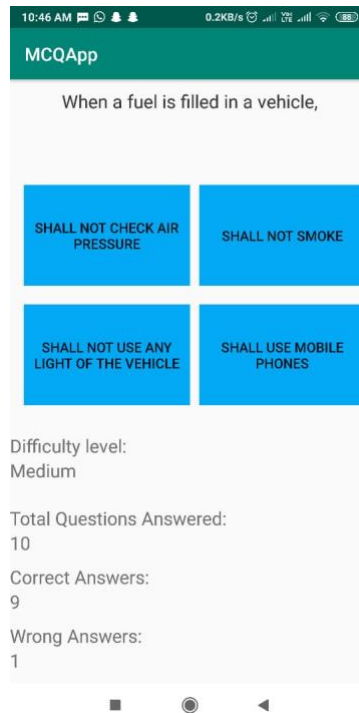
LEVEL EASY- QUESTION 1



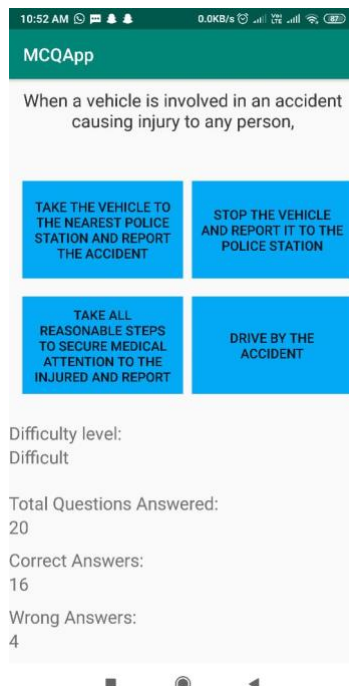
ON SELECTING THE CORRECT ANSWER.



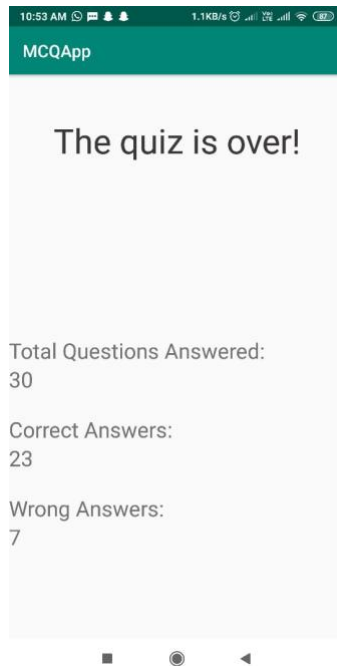
ON SELECTING THE WRONG ANSWER (IN RED), THE CORRECT ANSWER IS DISPLAYED.



ON ACHIEVING MORE THAN 7 CORRECT ANSWERS, THE LEVEL IS UPGRADED TO MEDIUM LEVEL ONCE THE EASY LEVEL IS COMPLETED.



ON ACHIEVING MORE THAN 15 CORRECT ANSWERS, THE LEVEL IS UPGRADED TO DIFFICULT LEVEL ONCE THE MEDIUM LEVEL IS COMPLETED.



ON COMPLETION OF THE QUIZ, THE FINAL SCORE REPORT IS GENERATED.

8. CONCLUSION

This project, “MCQApp”, aims in helping those in need. It aims to increase the enthusiasm between the applicants and hopes that this reduces the tension for them. It also hopes to expand its purpose, by accommodating the Driver’s License Tests as well.

9. REFERENCES

- Mini App using Firebase in Android Studio- Programming Experts

https://www.youtube.com/watch?v=SiGIAvMH2Dk&list=PLF0BIIN2vd8tJjVKdNegtQF2j9CjmGOc_

- Stack Overflow

<https://stackoverflow.com/>