

“PREP4EXAM”

PROJECT SYNOPSIS

OF PROJECT-II (CSE)

BACHELLOR OF TECHNOLOGY

B. TECH CSE IIIRD YEAR

SUBMITTED BY

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Abstract

Technology grows every day in the field of Engineering and industry revolution. Android is one of the technologies that increased so fast as compared to other technologies. It makes the task easy to perform at various field IOT based application, Medical application and automobiles industry. These entire fields require an easy operating system that can be possible only with help of android development application.

We are currently working on the Android Application with the help native technology of Flutter. Basically Flutter is software development kit for developing android application that uses own language Dart (object oriented). Flutter makes the development fast for any kind of application and provides attractive GUI that's also main goal of application for users. Java also can be used for this project but it takes a lot of complex coding and dependencies.

We make the 'prep4exam' for conducting the basic exam and preparation for student. In this application we develop various models for exam like it can hold quiz and polls. It gives common platform for everyone where we can practice of exam with time duration. It simply requires one step registration for using this application. The main advantage of this application, that it is a cross platform app that can be used also ios.

Motivation:

The basic idea comes for 'prep4exam' from covid-19 because it opens new opportunity for various people and students. In the Pandemic situation, offline test and practice for exam is also difficult task. From here we get an idea, Why not we make an application that can perform all these task? And move one step towards the growing technology of software development. We make this application for teachers that really want, students keep learning thing in also pandemic situation.

Existing system:

There are some problems in the existing system for example we went to the different platform for different type exams practice like 'Myquizz.com' keep practice only quizzes, but if we want make a poll for voting then we require different platform. So, entire redundancy makes disorder practice.

Table 1.1

Existing system	Prep4Exam
It is web based application	It is android application
Choose different platform for different exam practice	Require single platform various exam practice
Require laptop or pc for better experience	Require android or ios cell phone
Easy to use but not portable.	Easy to use and portable.

PROBLEM DEFINITION

Introduction

Various students fail in the exam due to lack of practice before the examination. They do not measure the time duration, for particular question in exam and waste a lot of time for single question so they get fewer marks. Maximum online exam are web based and require laptop or pc for taking exam and require strong internet connection. It also creates a problem for those students who haven't pc. This situation have been experienced in GLA online exam where we cannot back after moving forward and many students left their exam due to entire situation.

Objective:

The problem discussed above is only reason to developing this kind of application. "Prep4Exam" gives better user experience for practice of exam.

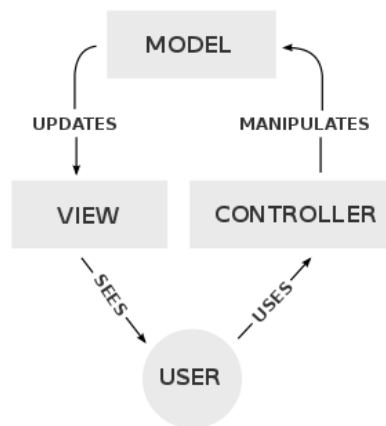
1. Easy to use and portable.
2. Single platform for various practices.
3. See the result instantly after just finishing the exam.
4. Having dashboard for updating the information.
5. The teacher can easily make records of students scoring and can save them at their server
6. The Students would be able to check their attempted quizzes so that they can know their mistakes done at the quiz time

Methodology:

It outlines how data will be collected and tools for collecting data. Model view controller (MVC) is software design for developing web applications. It consists three parts like

1. **Model** -The lowest level of the pattern which is responsible for maintaining data.
2. **View**-It is responsible for displaying all or a portion of the data to the user.
3. **Controller**-Software code that controls the interaction between model and view.

MVC isolates the application logic from the user interface layer and supports separation of concern. Here controller receives all requests for the application and then work with model to prepare any data needed by the view. The view then uses the data prepared by the controller to generate a final presentable response. It can be understood with the following diagram.



Planning:

This project is divided into four modules. Which are as follows?

1. **Authentication:** In this module, teacher or student can make their account on our quiz platform. So that every activity (quiz) can be saved and directed to their account directly.
2. **Quiz Dashboard:** From here authenticated user create or join the quiz.
3. **Poll Dashboard:** It is polling dashboard from where polls is start.
4. **Feedback Dashboard:** This dashboard is intensely added for taken the feedback of students.
5. **Result Dashboard :** From here user can view their results.

Hardware requirement:

1. Pc with at least 8GB RAM
2. i5 processor or upgraded

Software requirement:

1. Vs code IDE
2. Git Repository
3. Android emulator
4. Flutter sdk

Database:

FireStore (Nosql database)

Progammig language : Dart

References:

1. Flutter <https://api.flutter.dev/flutter>
2. Official documentation of firebase <https://api.flutter.dev/firebase>
3. Dart <https://dart.dev/>