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## TestoPrep: Application for aptitude test

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### ABSTRACT

*An aptitude is a component of a competence to do a certain kind of work at a certain level. Aptitude test is designed to assess your logical reasoning or thinking performance. By practicing the aptitude test mental ability increases and which can be useful for a student to crack the exam and for employee determining which job roles are best fit for them. As aptitude test value is increasing day by day as like use for the purpose of admission and selection of student in colleges and technical institute. The objective of this paper is to provide a user with all the material of aptitude at one place and the solutions for the questions.*

**Keywords:** Android app, TestoPrep, Aptitude, Verbal ability, Logical reasoning, SQLite.

### 1. INTRODUCTION

The aptitude test can be used as a scale of capabilities of a person. The test will give them an accurate conclusion of what is the actual capabilities of a person. Aptitude test conducts for various purpose like in placement, choosing a career, bank exam, academic improvement etc. One of the selection processes for hiring the student in companies is aptitude. It is very necessary for the student to teach them the method and tricks for solving the problem of aptitude. It is quite costly to join the aptitude classes and also not possible to manage the time for the classes. Reference [1], defines smartphones as a predominantly communication device, with additional computing power built in. The computing power building into smartphones allows it to offer a various kind of services as accessing the internet, playing games, and using the phone to store data as photo, videos, calendars events etc. Those various kinds of features offered by smartphones make it very interesting to users and a good and cheap alternative to personal computers [2].

The aim of TestoPrep online application is to provide a user efficient aptitude questions test based app. This app will provide a user with a section of the topic in one place and also a solution for it. This app will help all the user who wants to appear in a competitive exam. In this application, the user will perform a test by considering the timer so that they can manage the time during the test. The user can give a test from any place and any time. The user can perform the test repeatedly and there is no rules and regulation for it. If user wants to practice a test they can immediately open the app and give the test. In this app, the maximum marks are given according to the number of questions. All the topics like aptitude, verbal ability, logical reasoning have been covered in this app. The solutions provide a time saver method to solve questions. According to [3], Android is a Linux based operating system and it is open source, developed by Google and the Open Handset Alliance. Android is a review to be the largest installed base of any mobile platform, and it is growing incredibly, every day new millions of user are switch on their Android devices for the first time [4]

Aptitude learning help in observation and prediction power, a person can do the calculation without the use of a calculator and also increase the analytical and logical thinking. The more you practice these test it can improve person's intelligence, IQ, EQ, SQ and develop common sense and presence of mind. Aptitude is important for any type of competitive exams and its value is increasing day by day.

## **2. METHODOLOGY**

Once a user uses the application firstly they need to choose the test module for the further process to be execution. After that, the various topics are given to the user. The user selects one of the subtopics of the previously selected topic. Then after the online database will search the related topic questions and response to the user. The user has to give an answer from multiple choice question and then user answer will compare with the correct answer in the database and correct answer marks will be stored in the database. After completion or exit of the test, it will display the result.

If the user wants the full description of the questions so they can directly get the solutions and shortcuts to the question from the solution module. The Manifest is the file where permissions are declared. Every application must have a manifest file in its root directory. Those permissions declared as strings in the application's manifest file [5], and cannot be changed or modified after installation. In the solution module, all the solutions of the topics are given. There are various type of framework which evolved strengths and weaknesses of the recognized framework

### **RAD(Rapid Application Development) Model**

The phases of the rapid application development (RAD) model are:

- Business Modeling
- Data Modeling
- Process Modeling
- Application Generation
- Testing and Turnover

The potential interaction of applications between each other. Mobile devices have many applications from various sources with the possibility of interaction between them. Today, there are at least five important platforms (iPhone, Android, Blackberry, Windows Phone, Symbian) [6], but detailed examination of all the platforms will be impractical. Also, a large portion of the mobile markets in the world is currently iPhone and Android [7].

## **3. MODEL DESIGN**

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Suggestion for acquiring user needs was to apply disciplines such as psyche and sociology as well as looking at past successful designs. Also, constant testing and improvement of the design by appealing to the actual users were considered to be crucial. User-centered design was the focus because the general design principles may not work on a small screen size. To comprehension the users philosophically, and using various methods and activities to find out what significance for the users. Some of the methods included creating user framework, online inquiry and user self-reporting techniques. The most effective way was to get user response on the design through a prototype. There were few design instructions that stood out. Use of symbols were suggested to replace text whenever possible to free-up space. Generally, pictures are easier to remember than text. The authors argued that well-designed outline are a powerful feature that can overcome restrictions of small screen sizes[8]. AppIntent [11] uses symbolic execution to generate a sequence of GUI manipulations that lead to data transmission. Android apps have led researchers to focus on the private data leaks[12].

3.1 FLOW CHART

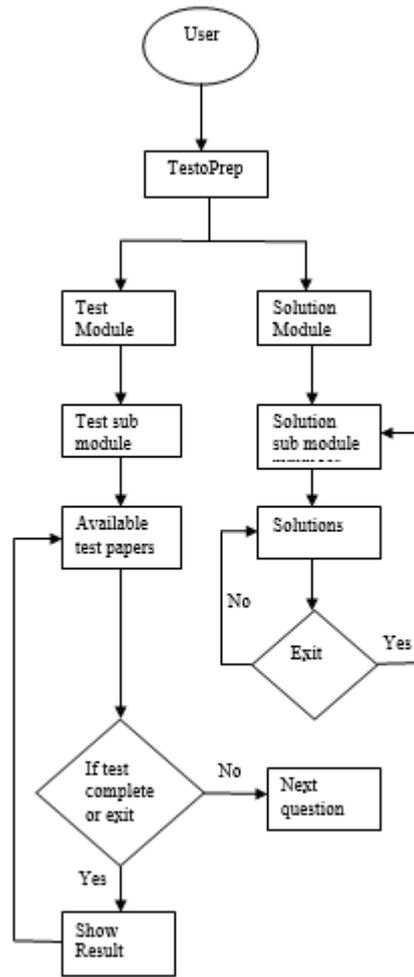


Fig 3.1 Flow Chart

Android applications and fundamental service managers were created and assigned the responsibility of administering access[9]. A data-flow analysis [10] is a technique to compute at every point in a program a set of possible values.

Main Screen

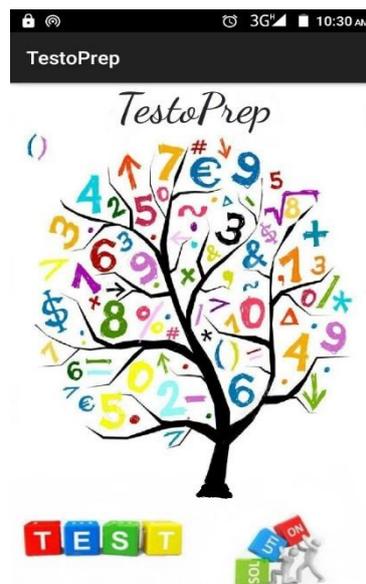


Fig. 3.2 Main Screen

The main screen includes two module i.e. Test and Solution

Test Screen



Fig. 3.3 Test Screen

This module includes Aptitude, Verbal ability, Logical reasoning.

Aptitude Test Paper

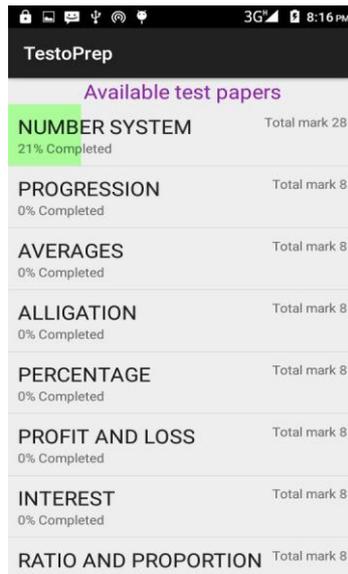


Fig. 3.4 Available test paper

This includes all the topics of aptitude.

Number System Questions

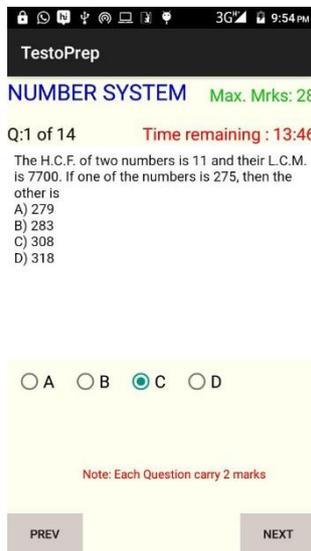


Fig. 3.5 Number System Question

This page includes number system question and timer is also provided

Result Obtained

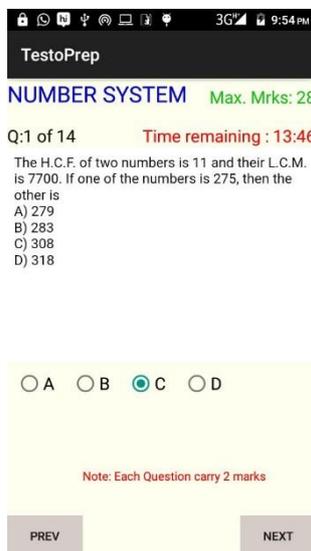


Fig.3.6 Result Obtained

A result is a pop up when user completes the test or exit in the middle of the test.

Exit Test

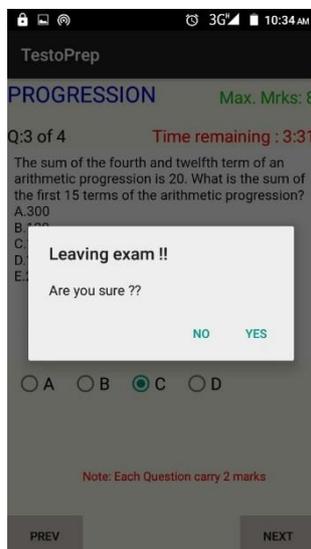


Fig. 3.7 Exit Test

Shows a pop up when the user wants to leave the test.

Solution Screen



**Fig. 3.8 Solution Screen**

This includes all the topics that are asked in the test.

#### **4. CONCLUSION**

There is a various aptitude test based application that provides the practice test. But the role of TestoPrep application is that it is all in one app and it provides the previous year questions for practice. It provides short methods to solve a particular question. The application is totally based on the user need and provide the test papers according to the competitive exams like GATE, bank exams etc.

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