

## **ANDROID APP FOR COMPETITIVE EXAMS**

**A.Sahithi**

*Department of Computer Science and Engineering, Narayana Engineering College Gudur*  
sahithi.aalla501@gmail.com

**Y.Vinay Kumar**

*Asso.Professor, Department of Computer Science and Engineering, Narayana Engineering College Gudur*  
vinay@narayanagroup.com

**U.Satyanarayana**

*Asst.professor*  
*Department of Computer Science and Engineering, Narayana Engineering College Gudur*  
nlrsatya510@gmail.com

**G.Manasa**

*Department of Computer Science and Engineering, Narayana Engineering College Gudur*  
gundalamanasa1112@gmail.com

**K.Hemalatha**

*Department of Computer Science and Engineering, Narayana Engineering College Gudur*  
kosuruhemalatha222@gmail.com

### **ABSTRACT**

Android Competitive Exams app helps us to learn and practice the topics essential for every competitive exam .It is also used to measure our cognitive abilities ,as it is designed as application one can learn from anywhere at any time this may be beneficial for one who is very busy with their daily schedules and very much intended to participate in the competitive exams this app provides you with practice mode and test mode .This app addresses with competitive exams like GATE,IBPS,SSC which are categorized into different categories provided with MCQs .To store all the questions the database used was a firebase as it is open source and a cloud storage so that it can be accessed by everyone from the application .in this application there is another module called Offline exam in which you can practice and take test without the help of internet.

**Keywords:** Android, Firebase, Competitive Exams, JSON.

### **1. INTRODUCTION**

Now-a-days we are becoming familiar and are effectively using everything through apps as it is more useful and scalable than websites .the importance of mobile phone in our everyday life and activities is increasing every second .This is so because there is numerous transformation in that mobile phones when compared with olden communication device used at that time. Today the need ability of mobile apps is on the increase such that it is producing noticeable change in the way humans feel and experience computer. Mobile apps are becoming the part in everyone's daily life to remind them what to do, to scheduling their works, all making easy simply through apps. The mobile apps usage presently seeing areas such as communication, education, cooking, social media, shopping, business, matrimony and banking. The easy way to access, search and learn is through mobile applications[3]. This paper deals with education ,Today everyone are competing in the race of competitive exams before attending to it we have to learn and practice the topics thoroughly to grab for what we are striving of, it will become easy for the learners if that is available in the form of application . The reason behind using android is because of its cost effective and open source operating

system. This project uses android with java language and firebase real-time database class in firebase .The IDE used for developing this application is Android Studio.

## **2. LITERATURE SURVEY**

SIETTE: Guzman and Conejos (2005) proposed an system for online examinations called System of Intelligent Evaluation using Tests for Tele-education (SIETTE) [1]. Android based application and increase dependency on E-Learning to replace traditional learning methods [4]. In 2018, around 11.5 lakhs of students registered for JEE Main and 2,31,024 students qualified for JEE Advanced and at the end only 31,988 (that too after the revised cut-off) students qualified in JEE Advanced. These candidates will fight for 11,279 seats available in the IITs in India. You have to take initial steps at a very early stage if you want to be in this challenging competition. Students, have to attend different exams irrespective of their career interest, either national or international-level competitive exams.

In this paper the author talks about online learning, in this the course is mainly categorized into 4 groups such as course environment, characteristics, outcomes and administrative factors [6]. Here most of the study is related to descriptor.

Nowadays, our government and some private institutes were conducting a lot of exams even for students from class 1 onwards. These may include Science Olympiads, NTSE, NMTC and many more.

If a student is attends any competition from early ages that will help them to learn and compete with others as a result that builds confidence and sharpens skills which differentiates you from other students on the same platform. Mobile learning helps the students learn adaptive contents based on student's interest [7]. Competitive exams will enhance and accompany with the skills required for understanding the concepts, which is required in a broader context when we appear for exams like JEE, NEET, Civil Service and many others. Exams will increase one's IQ, logical and analytical thinking and build a strong foundation for a career. This helps to open doors for entering into foreign universities including worldwide number one university, MIT.

There are many ways of E-learning and every can learn through their Phone, PDA's [2]. Top rankers in International Olympiads have an excellent chance of getting into top-class foreign universities compared to others. Some of the colleges have reserved seats for scholars. In this case, android competitive exams app helps to the one a lot for competing in the society from the above discussion the importance of attending and taking part in competitive exams really essential in that case this application is essential for learning and competing in this very competitive word that reminds of a quote "Life is a race you have to run fast".

## **3. METHODOLOGY**

1. The user interface of the android application is designed by using Extensible Markup Language (XML) which has different resources .This project comprises of Dashboard which is the first user interface seen when opened and this project also have many layout files like Competitive exam1, Competitiveexam2, Competitive exam3, Competitive exam4, offline exam which is again categorized and customized by using custom adapters.

2. The language used for the development of this application is Java to map all the layout files with the resources added on the firebase.

3. The main methodology in this project is connecting android studio to the firebase database which includes a few integration steps for integrating and placing the resources in the firebase database. The integrating steps need a unique package name and SHA-1 key which is used for security purpose and this is optional, by providing these things it will generate a JSON file which has to be placed in our application at the time of development. JSON stands for JavaScript Object Notation it is used for interchanging the information from the server to the desired place.

#### 4. RESULTS AND DISCUSSIONS

The application is installed in the phone and after opening it there will be a dashboard activity as shown in Fig 1. Later we can prepare for exams and there are sample competitive exams to practice.



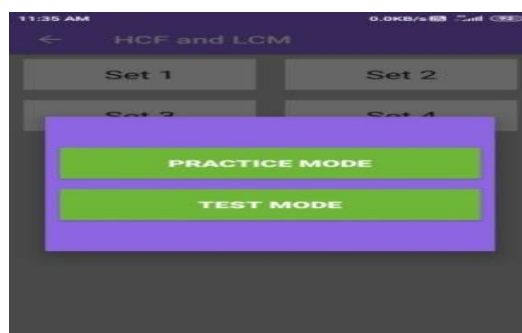
**Fig.1:** Dashboard Activity

We can take an offline exam with some topics such as aptitude, logical, verbal etc as shown in Fig 2.



**Fig.2:** Topics in offline exam

When we open competitive exams there will be two modes: Test mode and practice mode as shown in Fig 3. In practice mode we can practice questions and in test mode we can take a test to check our ability.



**Fig.3:** Two modes in Competitive exams

This is the two modes when opened any category of competitive exams. The questions will be displayed with 4 options and the appropriate answer should be marked as shown in Fig 4. There will be a rough space provided for doing calculations as shown in Fig 5.



**Fig.4:** Format of presenting question



**Fig.5:** Rough work space

When the answer is correct it indicate with a green background for the option and red background for the wrong option as shown in below figures.

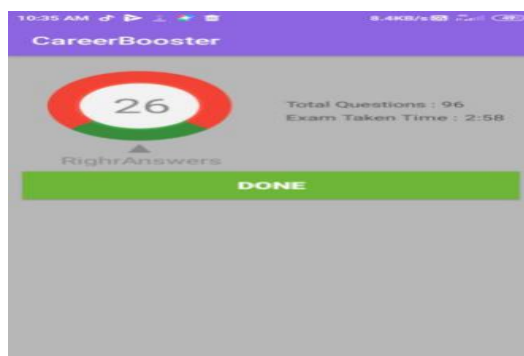


**Fig.6:** correct option in practice mode.



**Fig.7:** wrong option in practice mode.

We can represent the result in the test mode in graph format. Here it shows the percentage of right answers and wrong answers as shown in Fig 8.



**Fig.8:** Graphical representation of results in test mode.

If the user is confused with the answer they can use a 50-50 option which eliminates two irrelevant options as shown in Fig 9.



**Fig.9:** 50-50 option eliminates most irrelevant answers

## 5. CONCLUSION

From this paper, I concluded that this app installation and usage is very user friendly and helps to gain a lot of information necessary to face the competitive exams which might also help someone to gain confidence, for some people with lots of skills but lack in confidence.

## 6. REFERENCES

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