

Guidance Portal App: A Survey

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Abstract: Now a day's carrier is most important issue faced by every student. Everyone wants to become successful person in his/her life, but they don't know that what we want to do and how corresponding course will help to achieve our goal. So, to deal such kind of problems we are introduced our android application "Guidance Portal App". This application has many features that are very much helpful for student to build their carrier opportunities. The web application has become more and more reliant upon large amount of database and unorganized data such as videos, images, audio, text, files and other arbitrary types. It is difficult for Relational Database Management System (RDBMS) to handle the unstructured data. Firebase is a relatively new technology for handling large amount of unstructured data. It is very fast as compared to RDBMS. This paper focuses on the application of Firebase with Android and aims at familiarizing its concepts, related terminologies, advantages and limitations. This paper also tries to demonstrate some of the features of Firebase by developing an Android app.

Keywords: Firebase, Android, RDBMS

I. Introduction

The aim of this project is to help students to choose the right Career Path after their 10th or 12th. This app provides detailed information to enable students decide on the right Career Choices. It also provides detailed information for students choosing Engineering, Medicine, Law, Design, Arts and Management and many more fields to choose the right career. This App allows students to stay in tune with current trends in the education field and also provide Career tips and Career options. The other services provided by this app are:

College

It displays college information as well as respected courses available in the college. We provide details of various courses present in college. We store college information in cloud so everyone can access this information and download information to share with others for their use. It's very helpful to students who want to know about college and their courses, and then they easily choose right college.

Scholarship

It also provides various scholarship schemes information for students, so they can know about which scholarship is applicable for them.

Documents

For admission they also required various documents for admission process. If students or their parents does not have knowledge for documents which is required for admission for their children, then It's also available in our app. So, everyone knows about college documentation which required in admission process.

Colleges

This app store college information and carrier related media in cloud so everyone can access this information and download information to share with others for their use. It's very helpful to students who want to know about college and their courses, and then they easily choose right college.

II. Literature Survey

According to our survey, we found that Students will have access to career education and guidance in their school. The ultimate goal is for young people to leave school with: A developed sense of self-awareness An awareness of opportunities The ability to make decisions and plans The ability to take action.

Who can help students?

Secondary schools receive a Career Information Grant, which is based on their decile rating (the socio-economic area the school is in) and the number of students. The lower the decile, the more funding a school receives.

Each school usually has a career adviser, and some schools have a career department. This depends on the size of the school and the school's commitment to career education: ensuring career-related information is easily accessible to students

- helping students use tools and resources to find a career
- being involved with career-related activities in the classroom
- organizing career events (for example, career evenings or trips to career expos)
- working with teaching and guidance staff
- compiling student reports for other agencies (such as university hostels)
- Helping students with work experience placements.
- And applications available that provide guidance about carrier related issues but for this guidance they want to pay to sites [7].

This paper explores the existing literature and analyzes a plethora of studies done about the importance of establishing career guidance at schools, and finds that Vietnam is still deprived of the true spirit of career guidance. Similarly, there is a lack of rigorous research on the topic. International comparison showed that the key differences between guidance systems in different countries are related to experiences of economic development, political system, socio-cultural factors, the education and training system as well as professional and organizational structures.

While comparing the context of Vietnam with other countries, it is found that Career has not yet been paid proper and adequate attention. Hence, it has not yielded its desired objectives. The current study recommends that willing and motivated staff should be recruited and given professional training so that the desired goals and objectives are achieved [8].

Also, many institute and speaker are in society that they conduct seminar for it. But most probably students are unaware of that or some seminar have paid which is not affordable by every student. So, to deal such kind of problems we decided that we can build an android application in which all facilities are provides to students.

Career counseling and guidance affect career decision making process based on theories of traditional counseling. Career is based on student's education, goals, values, interests, vision and skills. Sometime a student is not sure about what strength he

Software Engineer	23	77
Architect	27	76
Interior Decorator	24	73
Dress Designer	21	79
Teacher	13	87
Lawyer	16	84

III. Methodology

The method and tools using in has. He does not know what career pathway and his aptitude might support. There are also other factors that might impact their career choices.

To take admission in college, many courses take entrance exam first and if student crack this exam, he/she can get admission for particular course. Also, for admission, students need various documents, certificate which is not known by every student and if students unaware about documentation for admission process, it can be not good for their carrier, unavailability of documents may affect on their admission process.

IV. Finding and Analysis:

Profession	No. of Professionals Guided by Career Counselors (%)	No. of Professionals not Guided by Career Counselors (%)
Engineering	17	83
Doctor	23	77
Chartered Accountant	22	78
Managers	14	86

Software Engineer	23	77
Architect	27	76
Interior Decorator	24	73
Dress Designer	21	79
Teacher	13	87
Lawyer	16	84

methodology is very important, it take the role to develop the whole project is successful or not. The design and the use of development methodology for the project guidance portal will describe the methods.

- **Java development kit**

The Android build process depends on a number of tools from the JDK. Check out the build system overview documentation. The first big piece we need from JDK is java- all your source code written in Java needs to be compiled before it can be converted to the DEX format.

Once your code has been compiled and packaged into an APK, we need jar signer to sign the APK.

- **Android Studio**

Android Studio is the official Integrated development environment (IDE) for Android platform development. It was announced on May 16, 2013 at the Google I/O conference. Android Studio is freely available under the Apache License 2.0.

Android Studio was in early access preview stage starting from version 0.1 in May 2013, then entered beta stage starting from version 0.8 which was released in June 2014. The first stable build was released in December 2014, starting from version 1.0.

Based on JetBrains' IntelliJ IDEA software, Android Studio is designed specifically for Android development. It is available for download on Windows, Mac OS X and Linux, and replaced Eclipse Android Development Tools (ADT) as Google's primary IDE for native Android application development.

- **Firebase:**

The Firebase Realtime Database is a cloud-hosted database. Data is stored as JSON and synchronized in real-time to every connected client. When you build cross-platform apps with our iOS, Android, and JavaScript SDKs, all of your clients share one Realtime Database instance and automatically receive updates with the newest data.

The Firebase Realtime Database build rich, collaborative applications by allowing secure access to the database directly from client-side code. Data is persisted locally, and even while offline, real-time events continue to fire, giving the end user a responsive experience.

When the device regains connection, the Realtime Database synchronizes the local data changes with the remote updates that occurred while the client was offline, merging any conflicts automatically.

The Realtime Database provides a flexible, expression-based rules language, called Firebase Realtime Database Security Rules, to define how your data should be structured and when data can be read from or written to.

When integrated with Firebase Authentication, developers can define who has access to what data, and how they can access it. The Realtime Database is a NoSQL database and as such has different optimizations and functionality compared to a relational database.

The Realtime Database API is designed to only allow operations that can be executed quickly. This enables you to build a great real-time experience that can serve millions of users without compromising on responsiveness. Because of this, it is important to think about how users need to access your data and then structure it accordingly.

- **Android:**

Android is a mobile operating system (OS) first developed by a Silicon Valley company by the name of Android Inc. A collaboration spearheaded by Google in 2007 through the Open Handset Alliance (OHA)

gave Android an edge in delivering a complete software set, which includes the main OS, middleware and specific mobile application, or app.

Android is an open source project called AOSP (Android Open Source Project). Google uses this project as a base to create its version of Android, which is then used by the other manufacturers.

As an OS, Android's job is to act as a translator between you and your gadget. When you take a photo, Android provides the button you tap and tells the phone what to do when you tap it.

When you make or receive a call, Android tells your phone how to do that. When you play a game, Android tells the game what movements you're making and what buttons you're pressing. It's like Windows, but for mobile devices

V. Firebase And Android App

An Android application has been developed for the demonstration of Firebase. In this app images along with strings are loaded to Firebase and retrieved from Firebase similar to Instagram. For the development of an Android app to demonstrate the use of Firebase, prototyping model has been followed.

Steps for connecting App to Firebase: Step1: An account in the Firebase Login has to be created at <https://www.firebase.com/login/> using the Google account.

Step2. Creating a new application on Firebase. Firebase creates a new application when one logs in for the first time. Also, at the bottom left corner, one can find an option to create a new application on the Firebase server. The app URL has to be unique among all applications deployed on Firebase.

Step3. Next step is to add Firebase as a project dependency. Make changes to the following lines to the build.gradle file, which is located in the app's project folder, and not the root folder.

```
dependencies
{
    compile 'com.firebase:firebase-client-android:2.5.0+'
}
```

After adding any dependency one has to make sure to sync the application.

If there is any build error complaint about duplicate files then one can choose to exclude those files by adding the packagingOptions directive to the build.gradle file:

```
android
{
    ... packagingOptions
    { exclude 'META-INF/LICENSE' exclude 'META-INF/LICENSE-FIREBASE.txt'
      exclude 'META-INF/NOTICE'
    }
}
```

Next, add permissions to Android application, Add network permission to the app, the same way it has been done for parse earlier. Now add the following line to the AndroidManifest.xml file:

```
<uses-permission android:name="android.permission.INTER NET" />
```

The User-Interface is designed for the android application in Figure 2 .The name of the app is given handshake. It has a view of image along with title and description.

VI. Result

The screenshots of the app developed in android studio have been included:

Figure 5.a is the home screen of the app where user can select one of the options to get knowledge about particular module like various career of their future or courses after 10th or 12th and many more.

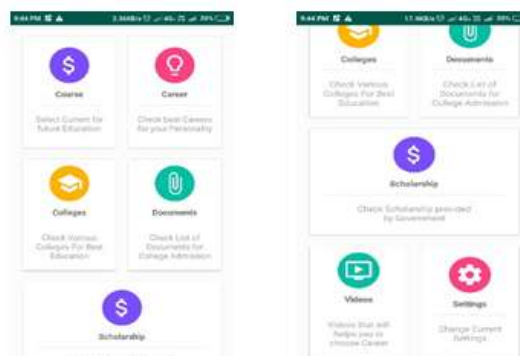
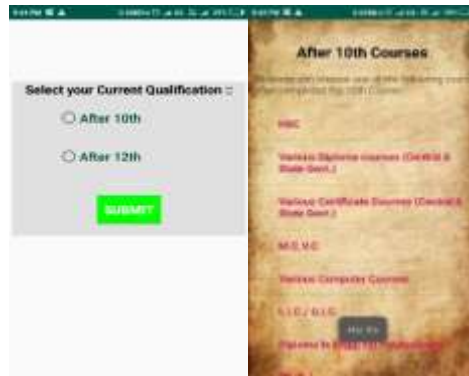


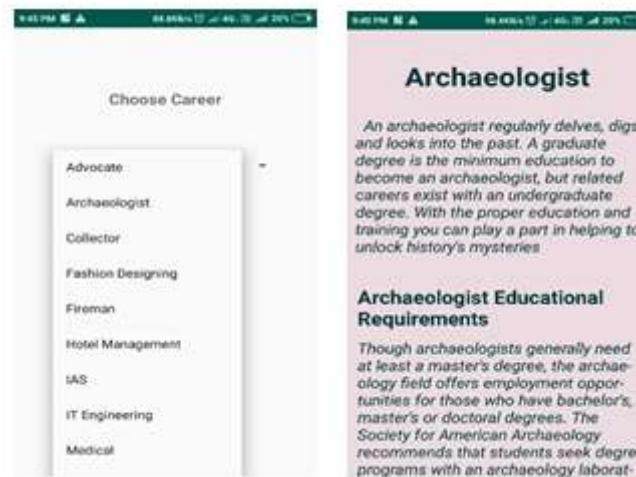
Figure 5: (a) (b)

Above figure shown the Main Activity of app which allows users to get various kinds of things for their career and education purpose.



(c) (d)

Figure (c) & (d) is the course module in which student select their current education and app will display various course offers that he/she can do.



(e) (f)

(e) & (f) display information about various careers that he/she wants to go.



(g) (h)

(g) & (h) display information about various colleges and their respective courses.

VII. Conclusion And Future Scope

This paper highlights on the study about google provided android studio and its unique features. This paper helps in studying how to use android studio for the developing Android application according to the developer requirement. This also helps in making android apps faster and efficient. The study material is based on the data provided online and referring to the examples given. Google has been updating android studio on regular basis. The work can be further extended by adding new features and exploring new possibilities in our Android applications.

Also, we have some future scope of this app that will help students a lot. In future, we add regional languages to deliver what students wants. Also, in app we provide discussion forum so student can ask any queries about their education and career and our team will provide valuable information about their queries.

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