

Notes-4U an Android Application

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Abstract

Its 21st century, smart phone has become an essential part of our life and the users having a smart phone with android operating system has also increased. Notes-4U is an android application. It is a application which will provide free notes to the student so that they do not waste time on finding notes and instead invest their time on studies and can score well in the examinations .This application will cover various range of courses and subjects which makes this application not only useful for college students but also for school students to study from.The users can login into the android application with email-id authentication and password. It also provides users a feature to upload and download the material on the application itself.

Keywords; *Android studio, Android sdk , firebase.*

I. INTRODUCTION

Notes-4U is an application based on android . Notes-4U isa application which will provide free notes to the students so that they can score well in the examinations . Notes -4U will resolve the big issues in the universities. This application will cover various range of courses and subjects which makes this application not only useful for college students but also for school students to study from . Notes-4U will provide best study material for every student and that too free of cost. The objective of the project is to provide the students with quality notes, so that they do not waste time on finding notes and instead invest their time on studies.

These days the content for studying is available but not under one roof. So some students try to find study material on the internet, others try to get material from their friends, sometimes they get it on time before the examination and sometimes they don't. Its 21st century and still there is no proper application for notes, so we came up with this idea to provide verified study material in an application. There are apps which provide notes and lectures but

they are paid and most of the students are unable to buy it. So that's why we will be keeping this app free of cost.

Our project is based on application development and we have all the resources like internet , android sdk , Hardware for android studio and android have large number of users also.We are a team of two members and user requirement is our higher priority. Once the project development is completed, we will be launching this app on play-store in working mode and also the source of notes will be the users itself and development team can also upload the material.

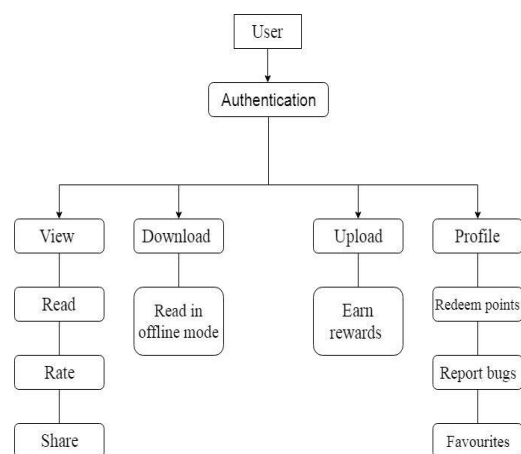


Fig 1: work flow flowchart

This application requires data storage capacity for storing files. Google Drive is providing storage for Rs

8 per GB/month and Rs 16 per 1 million requests, which is quite affordable and rest we only need electricity and internet for working further on our application. Hence the application is economically feasible.

These days' students focus more on the practical which is a good thing but they still need good material to study from and they have no such time to prepare notes to give exams, so when the exams come around its always difficult

for them to find notes from friends, teachers, and internet. Sometimes they found good material and sometimes they

don't, hence failing most of the times. So the point is that they must be focusing on gaining knowledge instead of worrying about proper notes.

There is a huge amount of knowledge available on the internet but still the problem is that the knowledge is

scattered especially when it comes to study material for students. Our project is significant because it provides users to upload and download the material on the application itself. This will impact our education system in a better way and just imagine every single child is getting verified knowledge to study. Literacy level will increase since in today's market everybody is having a smart phone and our application is free of cost. Also users will be able to earn money by uploading quality study material. Once the material is verified users will get points for it, which can be turned into digital money later on.

II. RELATED WORK

The output of the project is that we have developed an android application which basically provides the free study material to the students. Till now the app can download and upload the notes and the user can

make an account on the app itself to save the progress.

In the market, there is no particular application which is providing the study material for free. Byju's android application provides the study material and tests also but everything is paid and too costly which cannot be afforded by every student[1].

There are different websites also which provides the notes but not every website is having all the categories and full material for free and nowadays nobody uses websites for material, everybody wants an application because it's easy to use and one do not have to search again and again. Lecture Notes is a website providing the study material for free but on the web the web application and also to download the material one needs to have a subscription of their premium features[2].

There's another mobile application named Unacademy which teaches online and provides study material also but the major drawback of the application is that it doesn't include the necessary courses and majorly focuses on the certain exams only which is not sufficient .[3].

So the main application of our project is to provide the students with quality notes, so that they do not waste time on finding notes and instead invest their time on studies. These days the content for studying is available but not under one roof. So some students try to find study material on the internet, others try to get material from their friends, sometimes they get it on time before the examination and sometimes they don't. Its 21st century and still there is no proper application for notes, so we came up with this idea to provide verified study material in an application. There are apps which provide notes and lectures but they are paid and most of the students are unable to buy it. So that's why we will be keeping this app free of cost. There will be further adding to this app to make this application look good and maintain a better user interface .More animations need to be added in the application and

to make more lovable we will also add some prizes for the users .

III. METHODOLOGY

Different methods and techniques used to make this application were mostly the software's and framework provided by the google itself . No third party software was used in making this application. All the softwares used are original and registered with the google. The different softwares or frameworks used were android studio, justinmind, draw.io, firebase console.

Android studio is a framework provided by the google itself . It is the main software and used to make all the android applications , the interface is quite simple and easy to used.

Justinmind is a prototyping tool used to make the prototypes before starting onto actual work . It helps in a certain way that clarity of the application is achieved that is what is needed to be done and what not . It is used to create a application but without the functionality.

Draw.io is a desktop application used to make diagrams , flowcharts , figures. It is a very useful software for software engineers and it is open source also.

For the database , we decided to use the firebase console provided the google itself . Its very easy to use and efficient also in retrieving and storing the data onto the server. It is a platform developed by the firebase team and later on acquired by google. We are using the real - time database , an API which synchronizes application data across iOS , Android and stores in firebase cloud. It provides different features which includes firebase analytics, firebase cloud messaging, firebase authentication , firebase cloud firestore , firebase storage , firebase hosting , ml kit .For stability of the application it uses crashlytics. Below the diagram shows its functionalities.



Fig 2: Firebase console

IV. PROPOSED WORK

Work regulated by us till now includes study of the android platform and the installation of the Android Studio and the SDK tools. We have begun the study of various modules and the related assets of the Android Studio . We are going through the study phase of the Android platform .

We have prepared an overall layout of the project and divide it into various functionalities like :-

(a) Login module :-

In this a user will be able to login with email and password. Other ways to login are through the social such as Facebook, google+.

(b) Sign-up module:-

In this a user will be able to sign up with email and password. Other ways to login are through the social such as Facebook, google+.

(c) Upload module :-

The user will be able to upload the document in the pdf format only. Files can be uploaded from the phone itself.

(d) Settings module:-

In this module the user will be able to change the settings of the app such as themes, Change password, change email, download limit, storage settings etc.

The profile module includes the information of the signed-in user in the app. The information includes user profile photo which he can upload or change any time, username which has to be unique, email used for the sign-up and course. One can also search the notes and check his profile. The user can also change the settings of the application. The file is displayed with information including topic, subject, course, owner name, size.

We divided the modules and worked on them separately and then combined the modules made by each member. The different modules were developed individually by the team members. For combining of the modules we used the open source platform github and there we made our own branches to work together. After some significant work we pushed the work onto the github and merged it with the main branch after testing.

Use case diagram is a depiction of the elements that are modules of the application and the interactions between them. It includes the user and the developer and their various interactions with the application. The different modules are represented by the oval-shaped circles and user and developer are represented by characters. It is used to identify, clarify and organize the system requirements. It is a standard way of modelling the application.

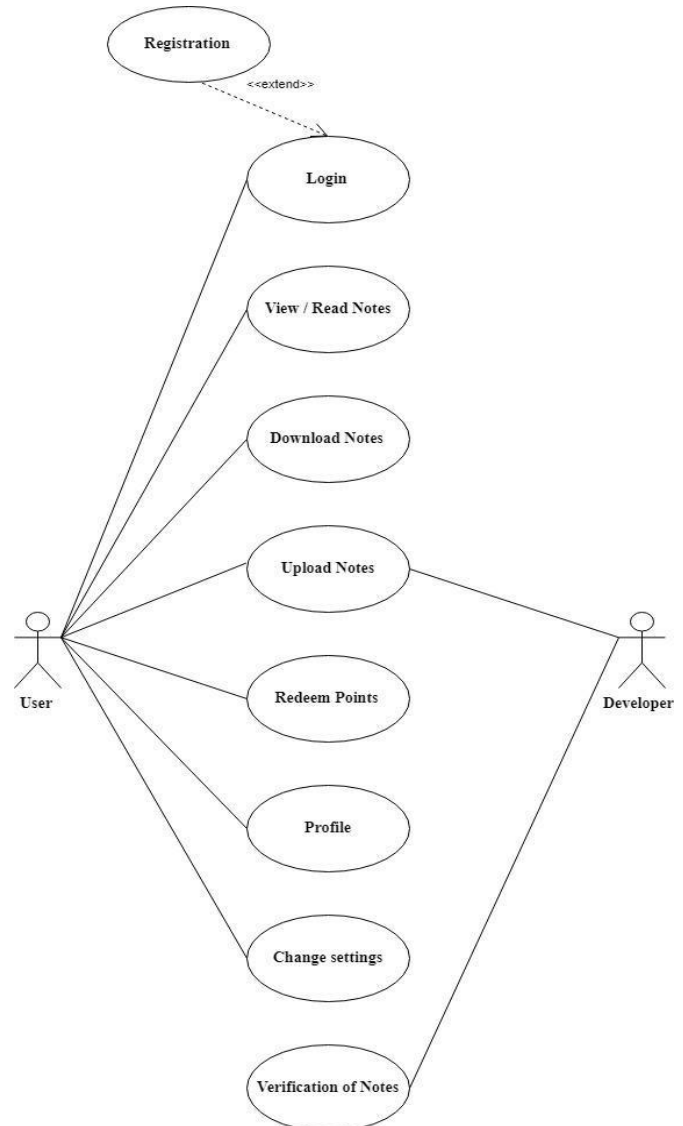


Fig 4: USE CASE

V. CONCLUSION

The project taught us a lot of new concepts such as firebase, how to include multiple sign-ins for the user such as email password login and google login. Then we learned how to manage the real time database using firebase. Also we gained the knowledge about the different courses available in the field of education and included them in our app. In this study, android application was designed and constructed. The different units were tested and confirmed to be working properly.

VI. RESULTS

Finally the application was completed in the given time and the android application was uploaded on the play-store and released as a beta version. Feedbacks from the students and teachers in the college were received and modifications will be done in the future .

VII. FUTURE ENHACNEMENTS

The present model can be enhanced to various degrees. For enhancements in the future models following points can be looked upon.

1. More study material would be collected and uploaded onto the application for better results.
2. More modification can be done in the algorithm selection part as that totally depend upon the interest of the developer of the model.
3. In this model only the suggestion is given for the betterment of results according to the user demand but in further implementations the suggestions would be quantified i.e approximate values of the measures that one should take will be provided.

VIII. ACKNOWLEDGEMENT

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