"Vishruta"An Notes App Using Cloud Firebase

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Abstract - A software program called an Android App is created to operate on an virtual device. The phrase used to reference to an apk file.

The program, resources, and meta data are all contained in one file, which is a compress file., Java, and C++ may all be used to create Android apps, which are then executed by a virtual machine. Android Studio serves as the official developer environment. The ability to permit installing with an apk file or over a wired connection because program are often released through app stores, for example Play Store, USB connection can be placed in the device settings this applications are typically publish distributers like the Google Play Store. Students may save all of their notes and important data digitally, generally in a cloud-based system, using note-taking software, also referred to as note-taking applications. You can type, scrawl, and draw notes on your choice device, just like you would on paper.

Keywords: **apk file, Zip archive „Java,c++,virtual machine, Android Studio, developer environment, note-taking software, cloud-based system,scrawl,draw notes,**

I. INTRODUCTION

In the following work, we have developed an android application called 'Vishruta' which means notes in the Sanskrit language. As the name suggests, this application allows the user to create, save, edit and delete the notes.

Why are we discussing creating a Notepad application in Android? Because With the increasing hassle all over, people often forget carrying a piece of pen and paper when they head out to the market or elsewhere. Having your own space app for noting down stuff is difficult to find in mobile phones as the usual writing spaces are present in SMS, WhatsApp, Messenger and so on. This application is developed in Java and xml.

In addition to the features this application also uses a cloud store database to store the data on cloud to allow access to the data from any android device through an active internet connection.

Android Studio:- The Android Studio environment was used to produce this work. Integrated Development is the recognized

An Integrated Developer's Environment (IDE) called Android Studio is built on top of IntelliJ IDEA. This program provides a centralized work area to develop many kinds of applications that run on Android, including those for wearable technology, Android TV, Android Auto, smartphones, and tablets.

You may separate the work into practical parts that you can individually create, test, and debug by using structured code modules. The features provided by Android Studio go above and beyond the strong code editor and development tools provided by IntelliJ to boost your productivity when developing Android apps.

Cloud Firebase:- Building a number of backend cloud services and applications frameworks are included in Google's Firebase. It provides hosting for a number of apps, including data bases services, authentication, and integration those are made in Java, Android, iOS, PHP, C++, JavaScript, Node.js, Unity, and other programming languages. Cloud Google has developed a cloud-based platform called Firebase that offers a variety of resources and services to developers to aid in the creation and maintenance of mobile and internet Apps. Firebase provides functions such a live database, authentication, hosting, storage, and machine learning.

The usual writing spaces are present in SMS,Whatsapp,Messenger and so on.This application is developed in java and Xml
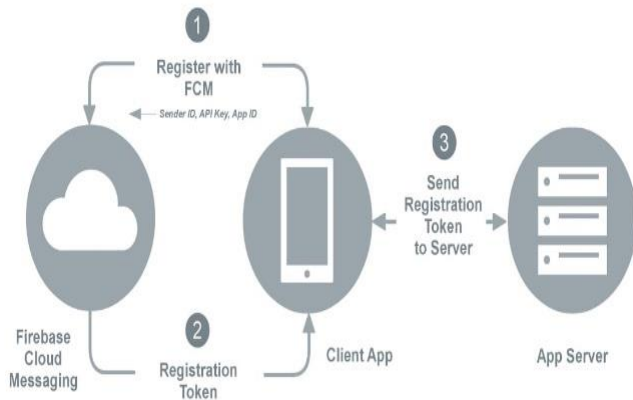
Fig.1 Cloud Firebase.

II. LITERATURE SURVEY

Myungseo Park1 Has used Cryptography to enhance their Note Pad App security After that, a case study for the forensic analysis is carried out using the note-taking applications ClevNote and Samsung Notes and our definition of security features(Myungseo Park et al.,2020)**[5].**

Soham Has develop an Android-based application that supports creating, storing, sharing, retrieving, and modifying notes in addition to storing text notes, images, video, and digital information. This application helps to finish the writing work swiftly and save a good amount of time by transforming all notes and resources(soham dixit et al.,2022)**[7].**

Ivan Poupyrev has developed a software name as 'Virtual Notepad'.Virtual Notepad has been tested in a Virtual Reality Emergency Room setting. Its a note-taking application that consists of a selection of simple interface features for text entry and note-taking in VE. The Human Interface Technology Laboratory has created a VRER to swiftly build and assess fresh data representations and metaphors for medical applications(Ivan et al.,1980)**[3].**

Mr. Venu Accha, Ms. Pavika Sharma has developed a software name as 'Digital Notebook' for academic purpose

Their software's goal is to increase the human-computer interaction by storing material in the form of human handwriting. Users of their software can connect to a person who shares a paper in his or her handwriting and can also authenticate a person's identity through handwriting,(Accha, Venu, and Pavika Sharma,2017).**[1]**

Towey has created a software programme (an app) that may be utilised by researchers, students, and teachers to improve teaching methods and help students to take notes. (Towey, Dave, et al., 2015)**[8].**

Dominik Petko has devlope an mobile portfolio app Pre-service teachers views on multimedia-based note-taking and mentoring**[6].**

III. SYSTEM ARCHITECTURE

The method used to create new applications for device which based on Android an known as Android software development.

Typically, Android Software Development Kit is used to build applications in the Java. Android apps are created using software called ADT (Android Development Tools). It essentially contains Eclipse IDE, an extensible plug-in framework and multi-language Integrated programming environment (IDE) with a workspace, framework for environment customization. ADT plugin is preconfigured and supplied with the IDE in the most recent version. The essential components are shown in this image of the IDE.
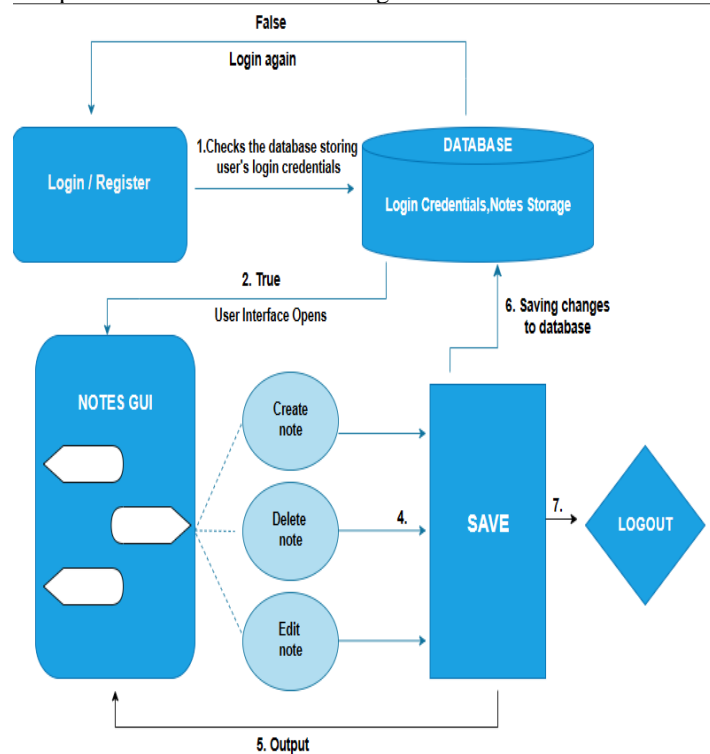

Fig.2 SYSTEM ARCHITECTURE

IV. METHODOLOGY

Phase One: User-Interface Designing

The Notepad app's User-Interface is quite simple, and it can be made by adding just one line of XML code.

The fundamental user interface elements used are:

o A linear layout that serves as the parent.

o Edit text before noting it.

o   Three Buttons:
o   One for creating a new document.
o   One for saving the text file.
o   One for opening any previously saved file.

Phase Two: Creating the Java Class

The FileInputStream and FileOutputStream classes are required by the Java class in order to read from and write to memory, respectively. Additionally, two alert dialogues are added to the code to ask the user for approval before saving or creating a new document.

We add onClickListerners to the three buttons and call the corresponding methods right after creating the Button and Edit Text objects.

Transport Drawer (Navigation)

Any Android app nowadays has the Navigation Drawer, which provides android apps the freedom to create menus that travel to different portions of our app. This Android note-taking software has a navigation drawer.

Saving files

The option for users to keep their notes must come next. Without this capability, a note-taking app isn't very useful.

Firebase Authentication With Email One of the key features of this application is that it enables users to make notes without requiring them to register for an account (anonymous authentication). However, if the user wants to save notes into the database, he must register using his email, and after that, he can sync notes to this account. which the user may use on any of his other devices that have the note-taking software.

Main architecture

Now it's time to consider how to organize the app logic. It won't worth it to apply a 'real' architecture to an app mostly for demonstration. But there's still a need to manage states across multiple screens in the app.In this case, we're going to use the provider package to manage the app state. It allows us to write code in a reactive (or data-driven) style.
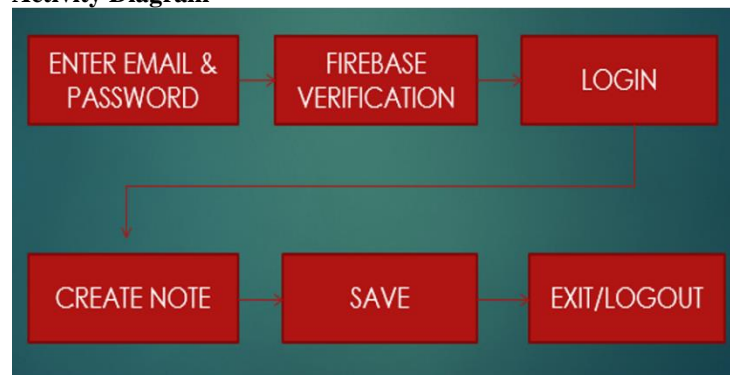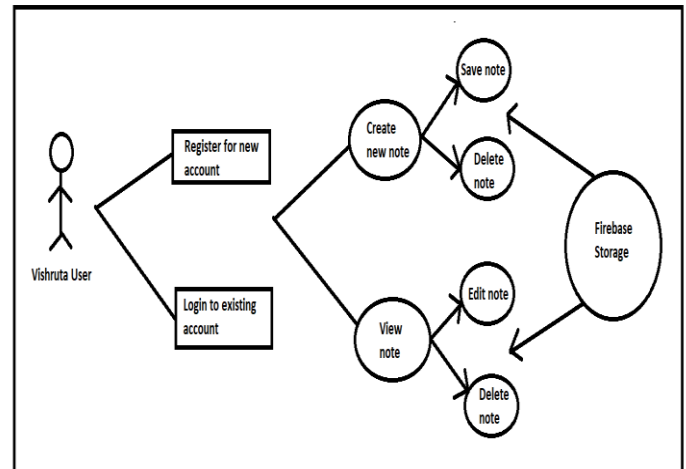
Activity Diagram

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Fig.3 Activity Diagram

Use Case

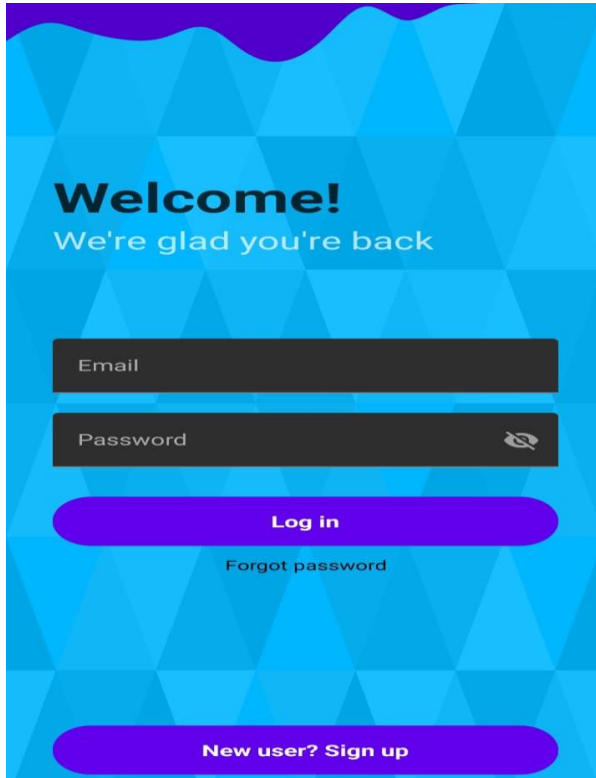### Fig.4.UseCase

V.   APPLICATION

The users should experience a simple and fast access to their data(notes) without any complications. Also, the data is saved on a cloud which provides security, privacy, restorability and safety to it.
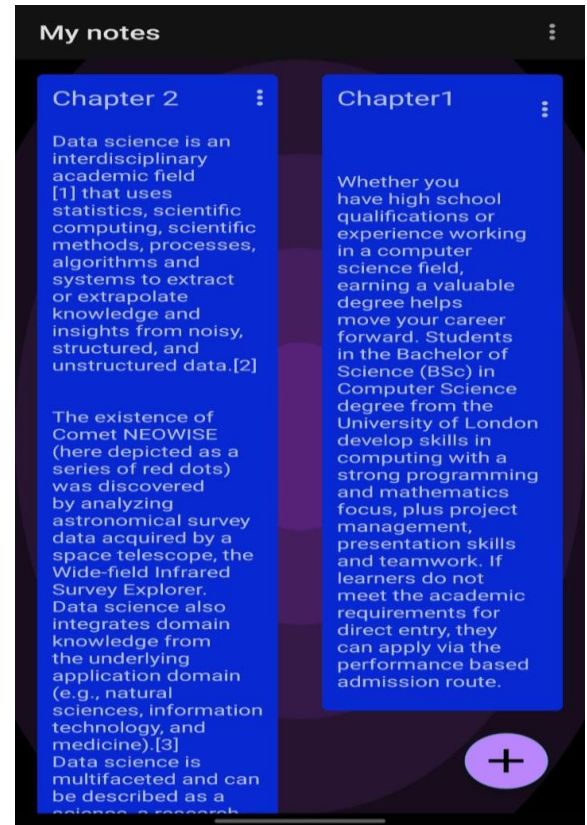
VI. FUTURE SCOPE

Over the past few years, the market for note-taking applications has grown steadily and consistently; it is worked that this trend will continue from 2022 through 2030.
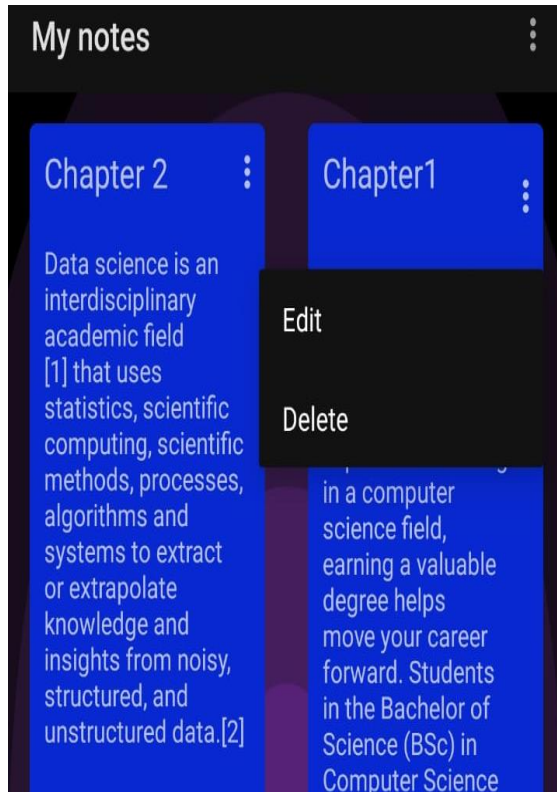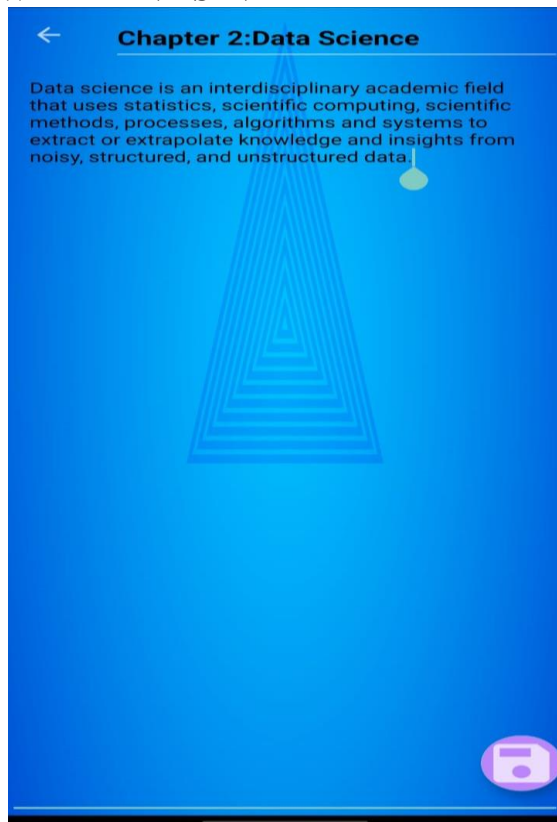
VII.   RESULT

- **LOGIN PAGE**

- **HOME PAGE**

- **EDIT AND DELETE**

- **WRITE AND SAVE**

VIII. CONCLUSION

The Notes app(Vishruta) is designed to create quick text notes that you may edit as needed and delete once you are done. It may be used for a variety of tasks, like adding your to-do list, making some significant notes for later use, and more. When you need rapid access to your notes, for example, the app is really helpful.

IX.REFERENCES

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