MINI PROJECT FINAL REPORT

(2022-2023)

Chatify

INSTITUTE OF ENGINEERING & TECHNOLOGY

Submitted By :

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Harshit Bhardwaj (191500322)

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Under the Supervision Of

Mr. Neeraj Khanna

DEPARTMENT OF COMPUTER ENGINEERING AND APPLICATIONS

Project Information:

Title Of Project	**Chatify**
Technical Details	**Hardware Requirements:** • Smart phone (5.0 or above) **Software Used:** • Android Studio Chipmunk **Technologies used:** • Kotlin • Firebase
Project Implementation Details	Implemented successfully

Department of Computer Engineering and Applications

GLA University, 17 km. Stone NH#2, Mathura - Delhi Road,

Summary of the Project Work

The project entitled Chatify was implemented successfully. The system has been developed with much care and free of errors and at the same time it is efficient and less time consuming. The purpose of this project was to study android app development using Kotlin.

This project helped us in gaining valuable information and practical knowledge on several topics like implementing authentication using Firebase, recycler view implementation in Kotlin, message room, inflator etc. The entire code is error free. Also, the project helped us understanding about the development phases of an android app. We learned how to test different features of an app and make it bug free.

This project has given us great satisfaction in having designed an app which can be implemented to anyone by simple modifications. There is a scope for further development in our project to a great extent. A number of features can be added to this model in future like audio, image and video file sharing, updating profile photo etc.

Department of Computer Engineering and Applications

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ACKNOWLEDGEMENT

The project work in this report is an outcome of continuous work over a period and drew intellectual support from various sources. We would like to articulate our profound gratitude and to all those people who extended their wholehearted co-operation and have helped me in completing this project successfully.

We are thankful to Mr. Neeraj Khanna for teaching and assisting us in making the project successful. We would also like to thank our parents & other fellow mates for guiding and encouraging us throughout the duration of the project.

Hemant Kumar (191500338)

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Department of Computer Engineering and Applications

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DECLARATION

We hereby declare that the project work entitled "Blood Bank" submitted to the GLA University Mathura, is a record of an original work done by us under the guidance of Mr. Neeraj Khanna.

Signature of Candidate:-

Name of candidate: Hemant Kumar

Roll No.: 191500338

Name of candidate: Harshit Bhardwaj

Roll No.:191500322

Name of candidate: Gaurav Yadav

Roll No.: 191500296

Name of candidate: Tushar Jain

Roll No.: 191500860

Name of candidate: Harsh Gupta

Roll No.: 191500317

Course: Computer Science And Engineering

Year : Third

Semester: VI

ABSTRACT

Mini Project is the requirement for all engineering students in order to complete their Bachelor of Engineering degree at the GLA University, Mathura. Mini Project is a very important program, as it complements both the academic and professional aspects of the engineering education. Exposing the students to the practical experience and actual working environment shall open the avenues for developing their skills and capabilities, as well as enhancing their intellectual and emotional personal. The Mini Project also can providestrong linkages between university-industries that shall pave opportunities for "smart partnerships" and industrially driven research. The outcomes of the EIT that are mainly based on the assessment covering the company's and university's evaluation will provide the feedback for student's performance after 75% completion of their engineering study. The remarks from the companies on the students will very much helpful for the university to have a continuous quality improvement especially on curriculum practiced.

SYNOPSIS

-> Introduction

The main objective of the project is to connect people in a simple way. This project is useful for finding new friends and connecting with people in simple manner.

Non-registered users can register themselves and start using the app. And registered users can login to their account using the login module. They can further see the list of registered users who are using the app and can start chatting with them with just a simple click. This app supports real-time chatting and maintains the history of the chats.

-> Motivation

The motivation behind making this project was to primarily learn the android development concepts using Kotlin. This project helped the team to discover and grasp the meaningful knowledge about what all takes place while creating an android application. It opens up a lot of future opportunities for all of us from adding more functionalities in this app only, to seek for better opportunities in the android development field.

Advantages

- Simple and user friendly interface.
- Connect with different people who use the app with just a single click.
- Maintains the history of messages which have been sent and received.

Disadvantages

- Doesn't have image sharing supported as of now.
- Doesn't have video and audio file sharing supported as of now.

Technologies used:-

Database : Firebase
User Interface Design : Kotlin
Web Browser : Mozilla, Google Chrome, Edge,OPERA
Software : Android Studio Chipmunk

Table of Content

1. Introduction To Kotlin

Kotlin is an open-source, statically typed programming language designed to interoperate with Java. As a standalone language, it provides excellent features over Java, but it also works well in conjunction with the older language. Kotlin's multiplatform capabilities allow developers to share code, logic, and data across several platforms: IOS, Android, Web, and more.

Advantages of Kotlin:-

1.Works Well with Java

Since Kotlin preserves a good portion of Java's object-oriented nature, it's straightforward to convert any pre-existing Java code. This compatibility makes both the writing in both languages and application migration from Java to Kotlin much easier and faster.

2.Clear and Concise Code

Kotlin's straightforward syntax makes your code clearer and more compact. Less time writing fewer lines of code makes your development team more efficient, saving you valuable time and money.

3.Safe and Consistent

Because your codebase is shorter and easy-to-read, bugs are compiled in the development process, so errors are spotted and fixed early on. Kotlin developers tried to create one of the best mobile programming languages for Android and fix the issues that Java had.

Project Description

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User registration Features

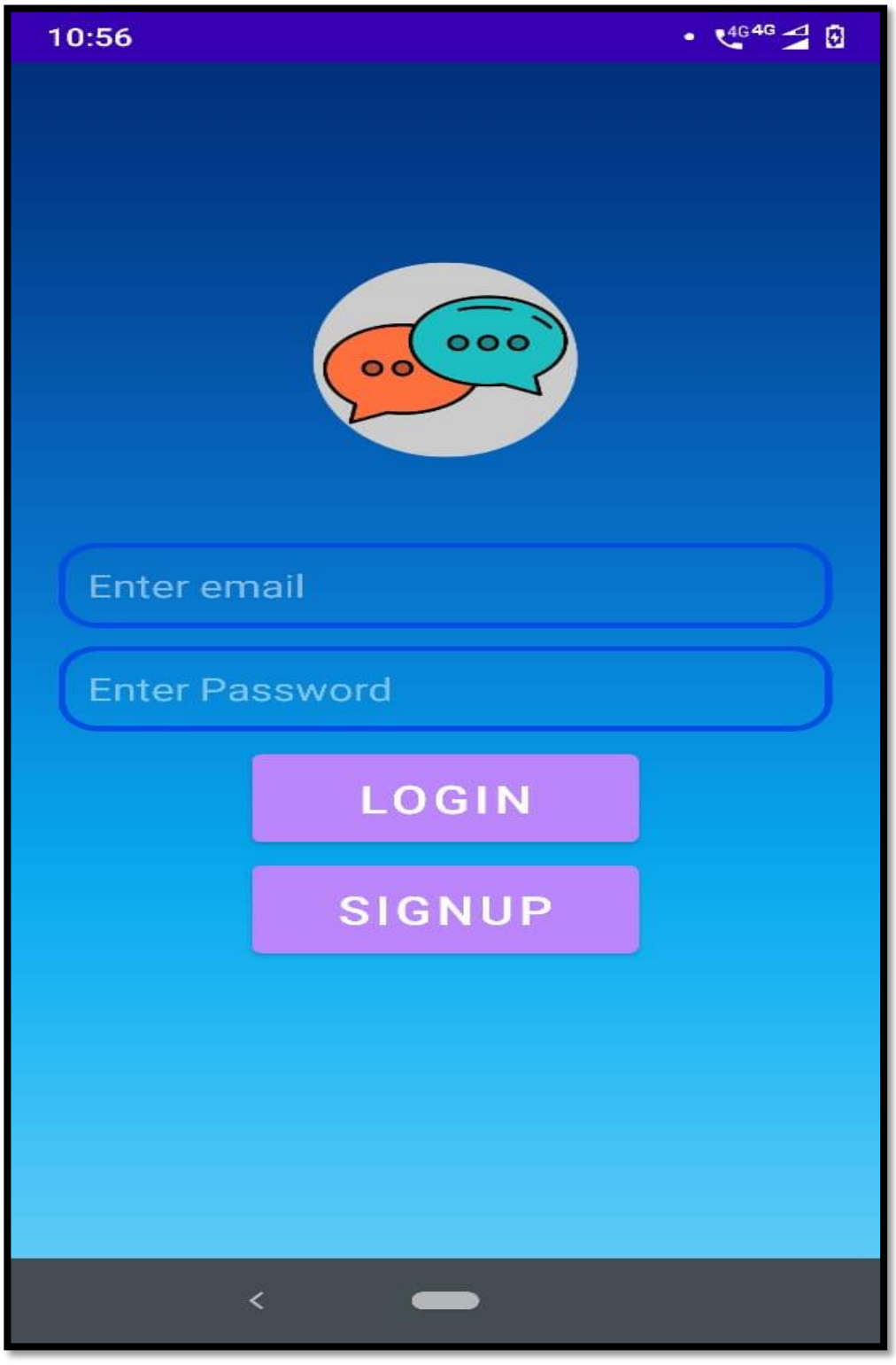
- **Add a name which will be displayed to everyone**
- **Add an email**
- **Setup a password**
- **Email and Password will be used by the user to login into their account**
- **User can logout from their account whenever they want**

User login Features

- **Enter the email which user used while creating the account**
- **Enter the password**

Progress till date

Login Page:-



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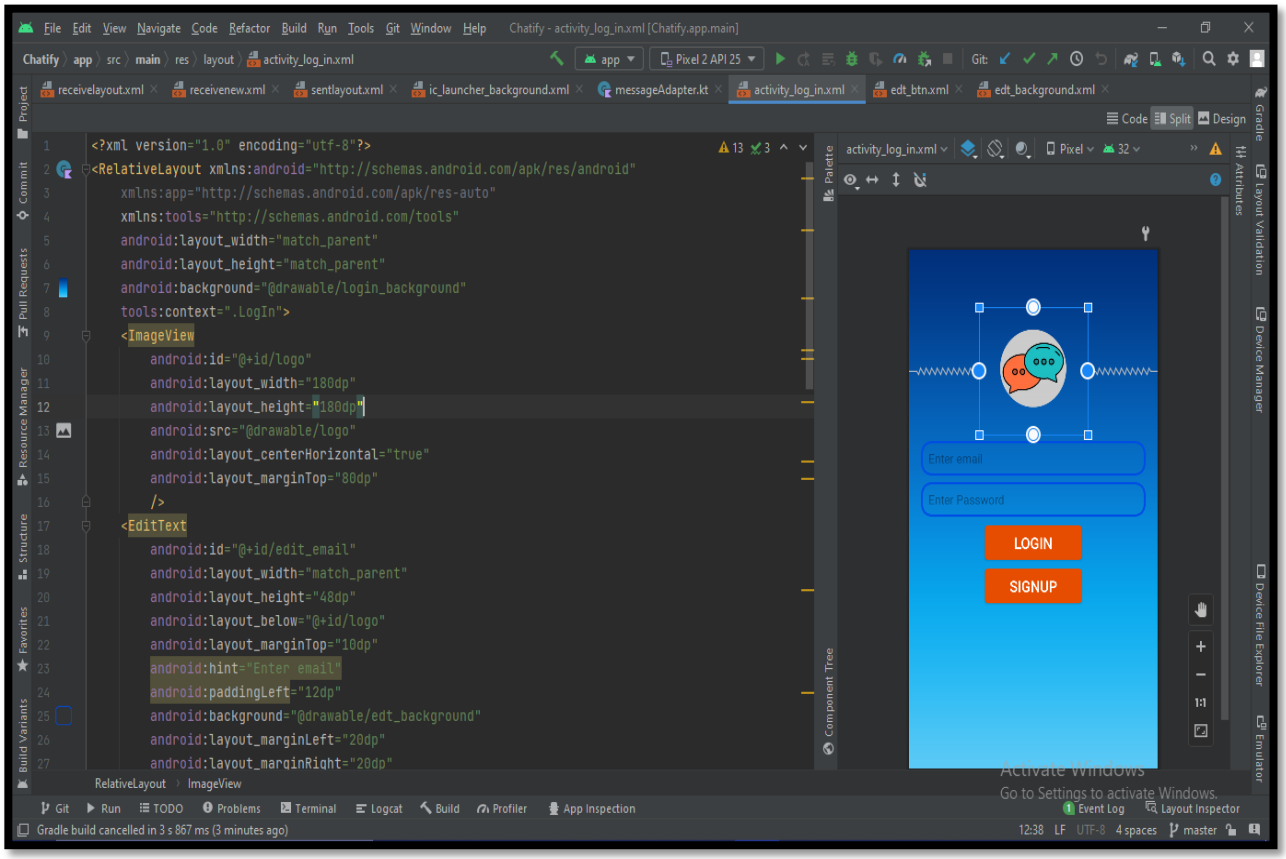
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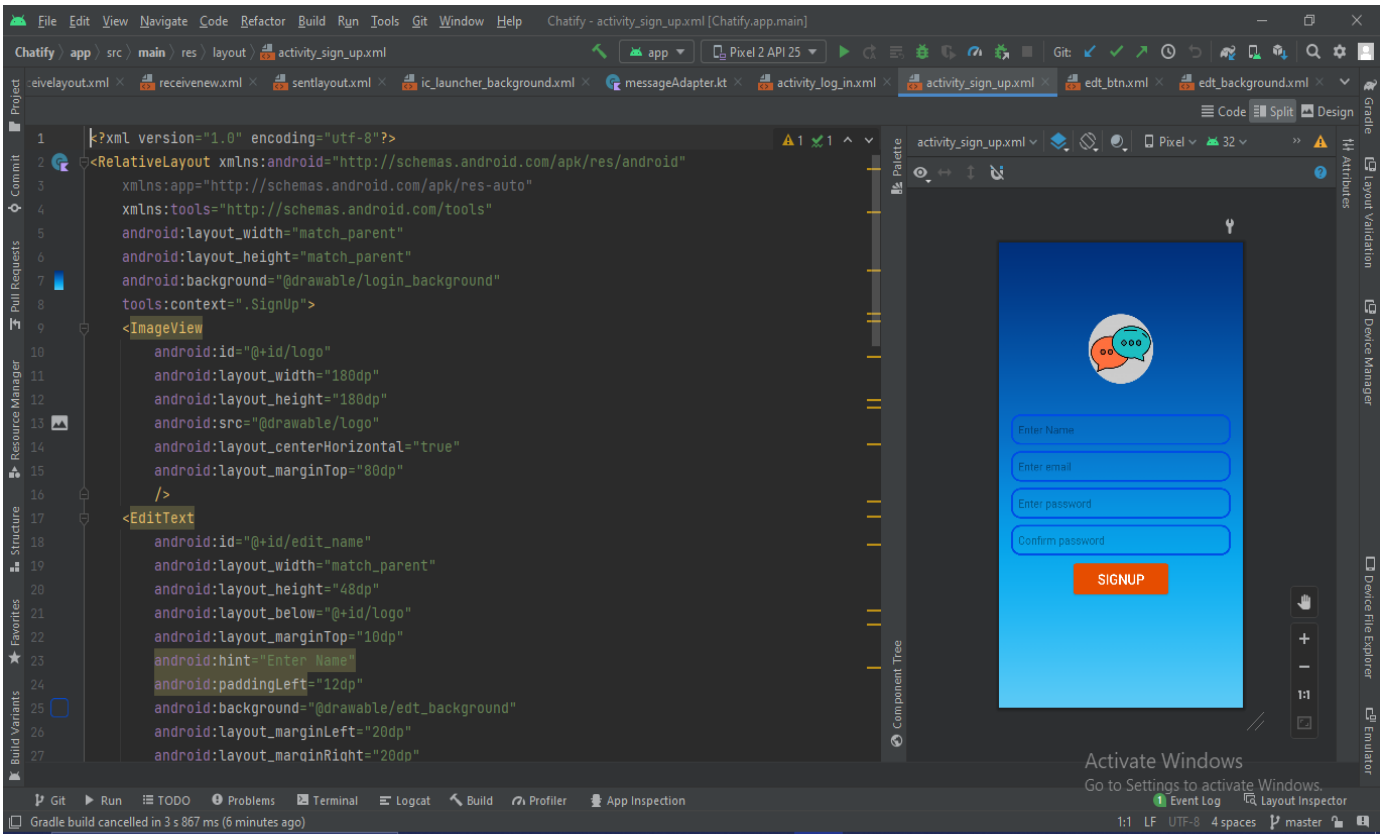
android:paddingLeft="12dp"
android:background="@drawable/edt_background"
android:layout_marginLeft="20dp"
android:layout_marginRight="20dp"
Enter email
Enter Password
LOGIN
SIGNUP

Signup:-


11:00
Enter Name
Enter email
Enter password
Confirm password
SIGNUP

Code Used:-


File Edit View Navigate Code Refactor Build Run Tools Git Window Help
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Pixel 2 API 25
receivenew.xml
sentlayout.xml
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android:layout_height="match_parent"
android:background="@drawable/login_background"
tools:context=".SignUp">
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android:paddingLeft="12dp"
android:background="@drawable/edt_background"
android:layout_marginLeft="20dp"
android:layout_marginRight="20dp"
Enter Name
Enter email
Enter password
Confirm password
SIGNUP
Activate Windows
Go to Settings to activate Windows.
Git Run TODO Problems Terminal Logcat Build Profiler App Inspection
Event Log Layout Inspector
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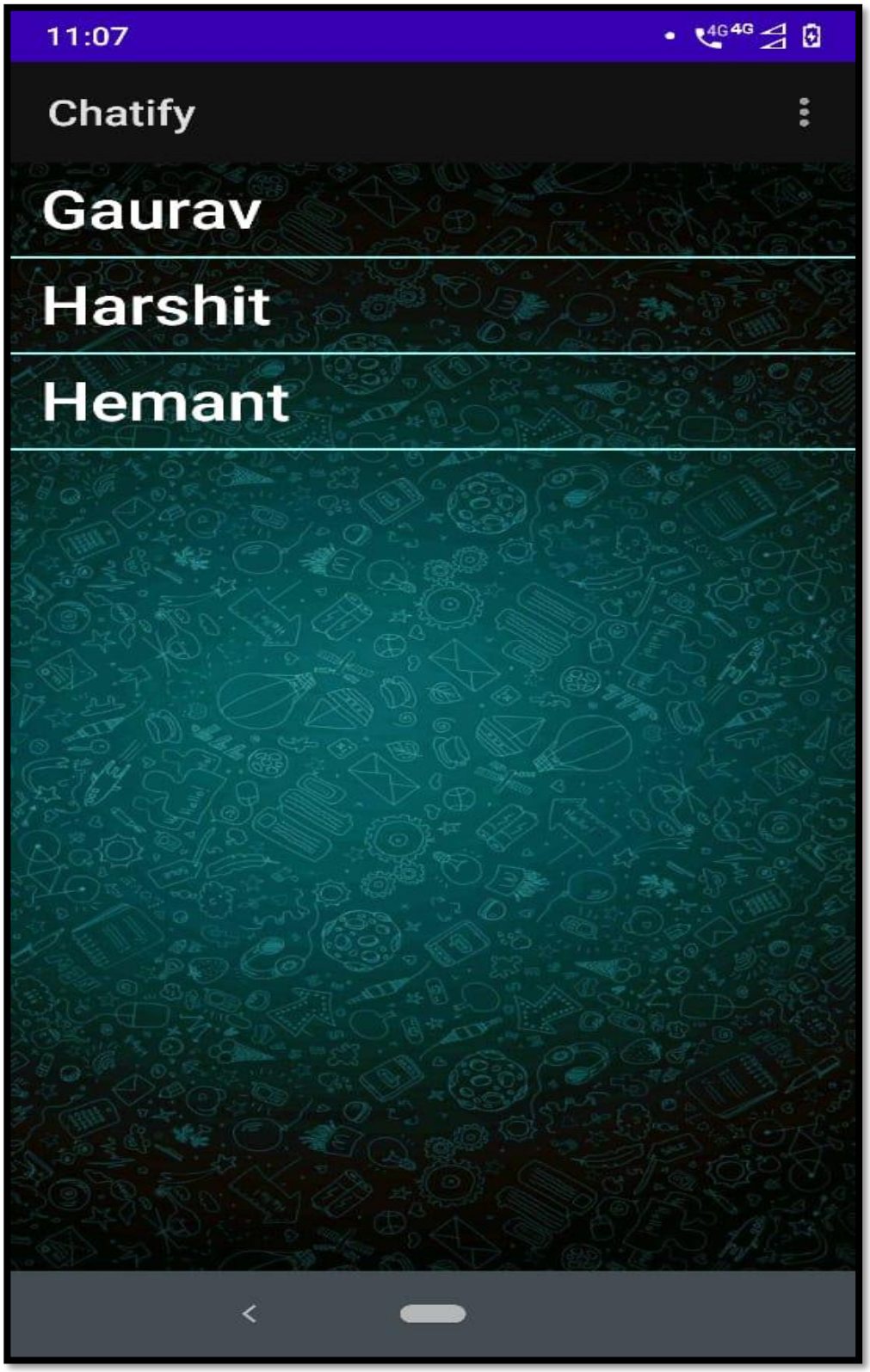
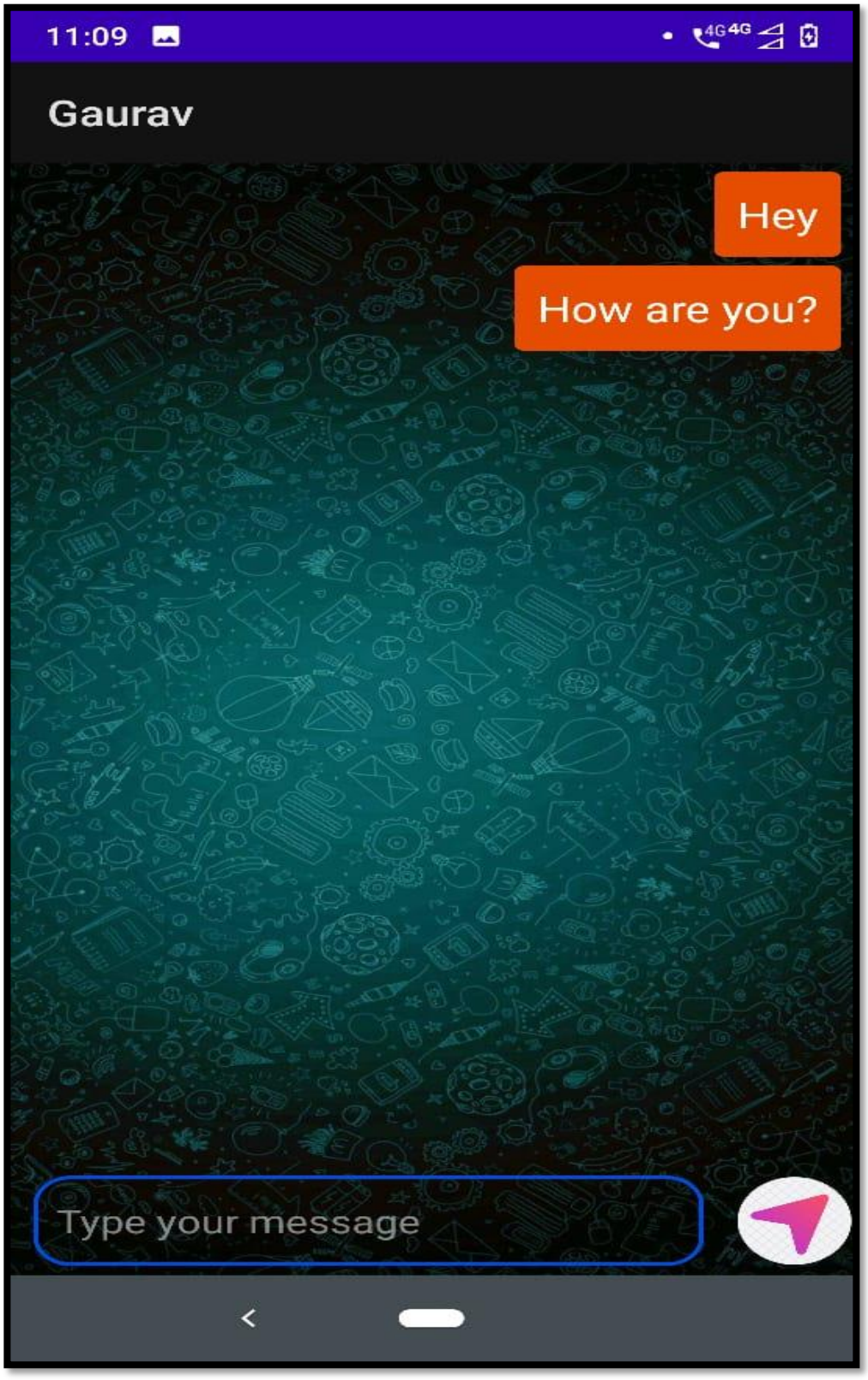
User List:-



Sender's Screen:-



Receiver's Screen:-

Conclusion

We have Completed Our Project Within Time Limit with the Coordination of our team members under the supervision ofour mentor Mr. Neeraj Khanna.

Our Project Repository is available at :-

https://github.com/hemant-24/Chatify

References

- https://developer.android.com/kotlin
- https://stackoverflow.com
- https://youtube.com/tutorialsEU

Faculty Guidelines:- Mr. Neeraj Khanna