



**MANAKULA VINAYAGAR**  
INSTITUTE OF TECHNOLOGY

Accredited by NBA

# REAL TIME FAMILY TRACKING APPLICATION

**DOMAIN NAME : ANDROID DEVELOPMENT**

**PRESENTED BY:**

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**GUIDE BY,  
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# ABSTRACT

With the change in human living standards, a human needs to travel alone at new places. He is not aware of various places at new location. His family members might be worried about his well-being . We have developed an Android based real family tracking App which is able to track current location of a person. It will inform a person about his current location at regular interval of time. We have also developed a database in which a user can save information about his name and address and this information can be hand over to a person who is interested in travelling at same place. This App is able to register new people and it is able to provide Log In facility at any instance of time. This application makes use of real time Firebase database.

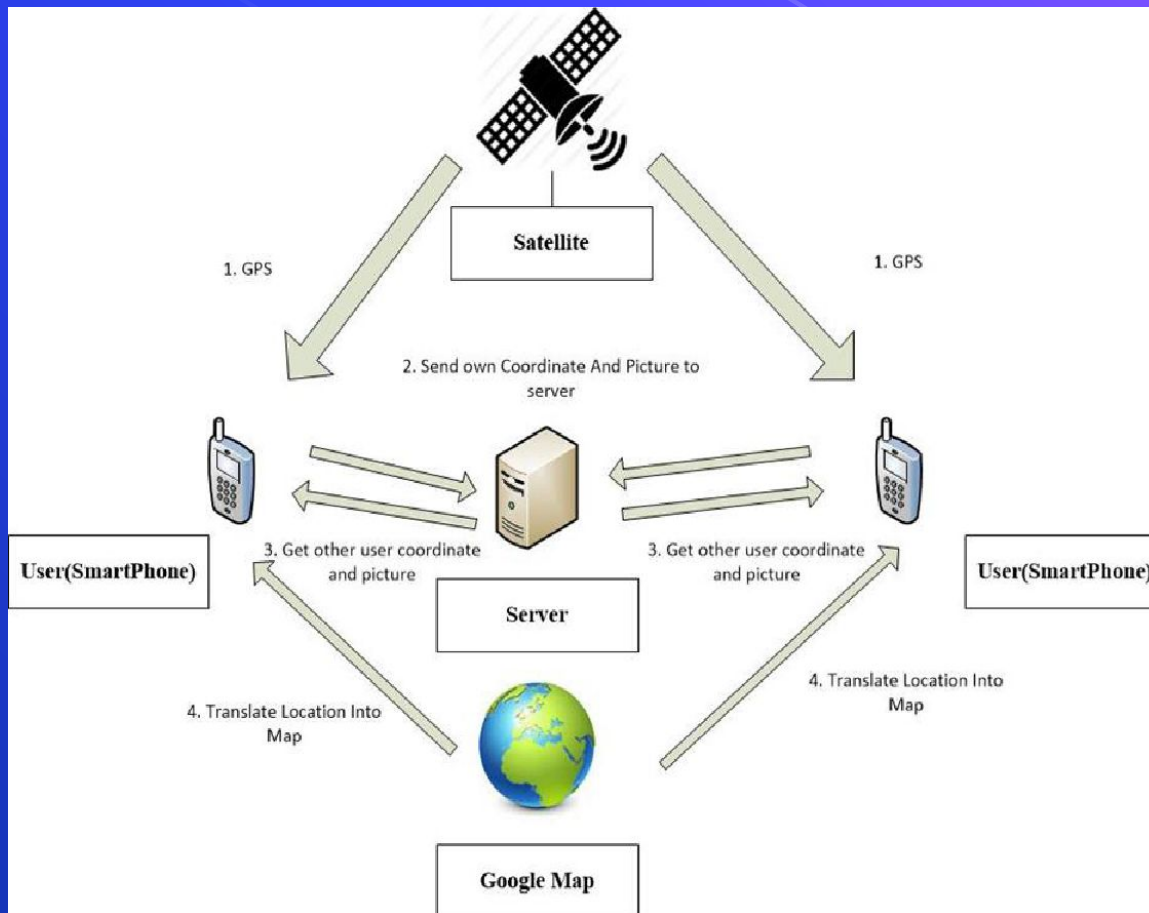
# INTRODUCTION

The project named Family Tracker is a mobile application which is designed to track the location of other people in real-time. The user will create or join the existing group with a unique code provided to them and with that code they all will get connected to each.

Our mobile application will work on android platform and for that user's network connection and GPS should be enabled.

If the user's network connection is not available then the app will show the last location of the user before the user turns off his/her mobile network connection.

# SYSTEM OVERVIEW



# SOFTWARE REQUIREMENTS

- FRONT END : XML , Android(JAVA code)
- BACK END : Firebase
- TOOLKIT : Android Studio
- API USED : Android Gradle Plugin



# HARDWARE REQUIREMENTS

- LAPTOP WITH 8 GB RAM
- SMART PHONE-Lollipop Versions





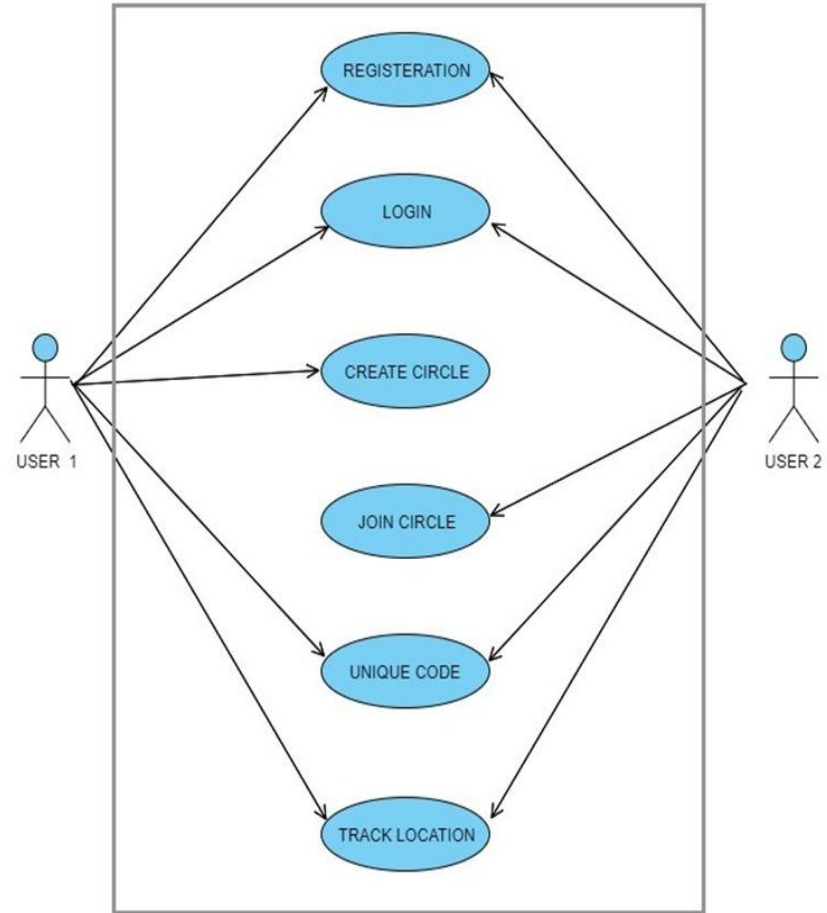
# DOMAIN

**Android Software Development** is the process by which applications are created for devices running the Android operating system. Android apps can be written using Kotlin , Java, and C++ languages using the Android software development kit (SDK), while using other languages is also possible.

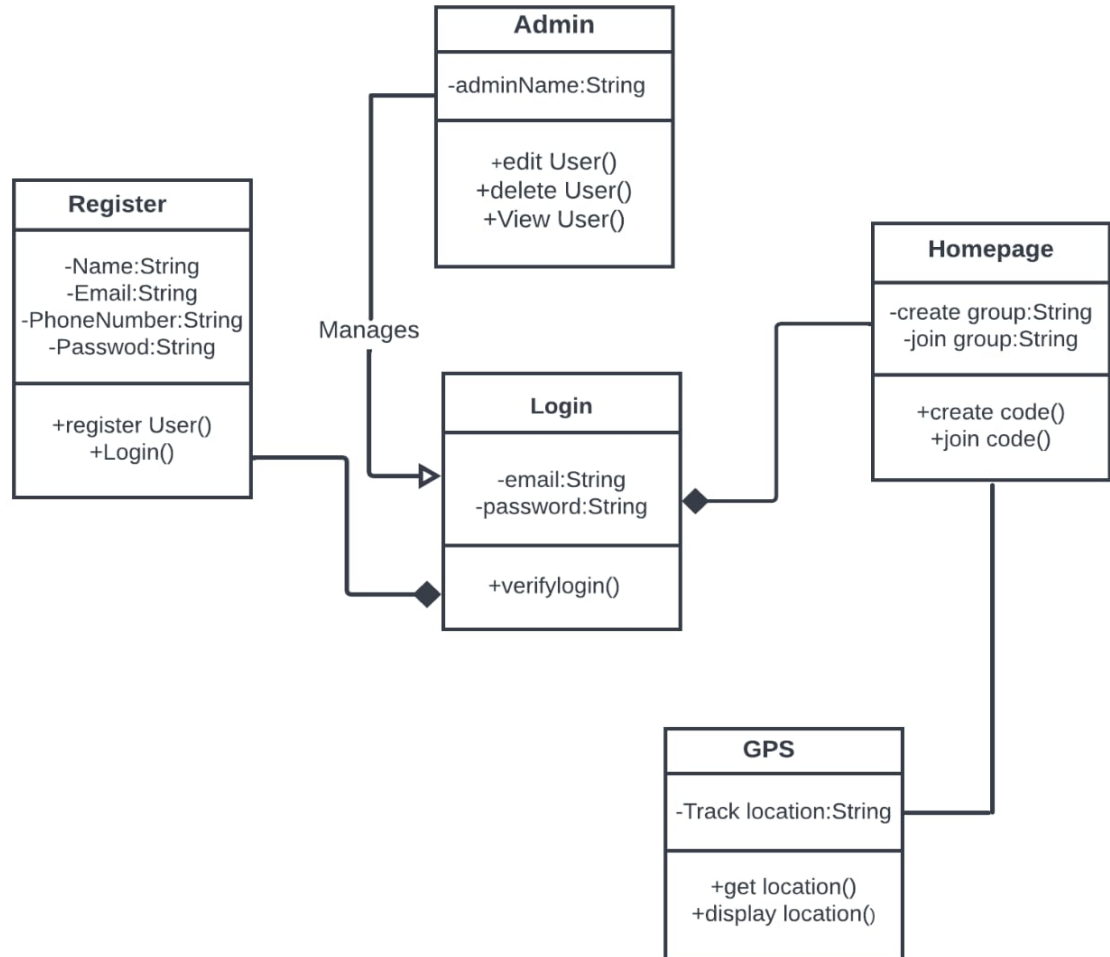
All non-Java virtual machine (JVM) languages, such as JavaScript, C or C++ need the help of JVM language code, that may be supplied by tools, likely with restricted API support . Some programming languages and tools allow cross-platform app support (i.e. for both Android and iOS). Third party tools, development environments, and language support have also continued to evolve and expand since the initial SDK was released in 2008.



# USE CASE DIAGRAM

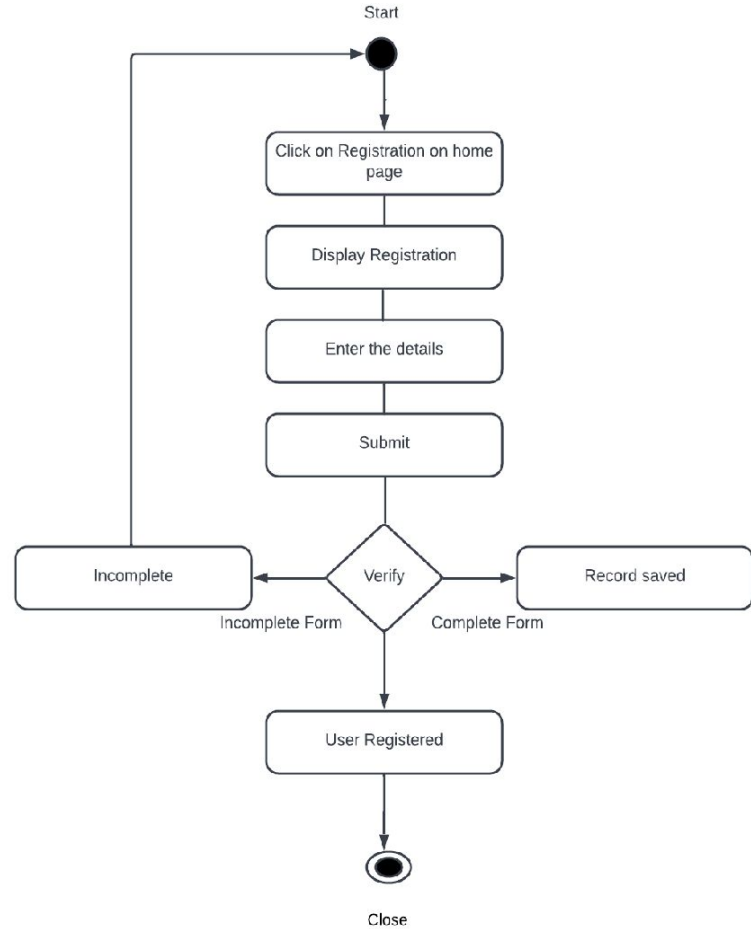


# CLASS DIAGRAM

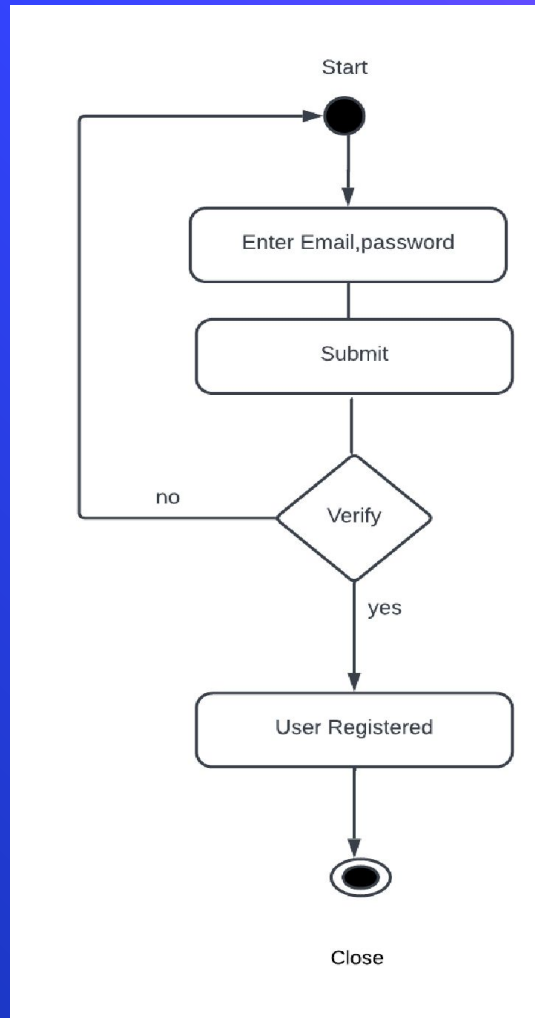




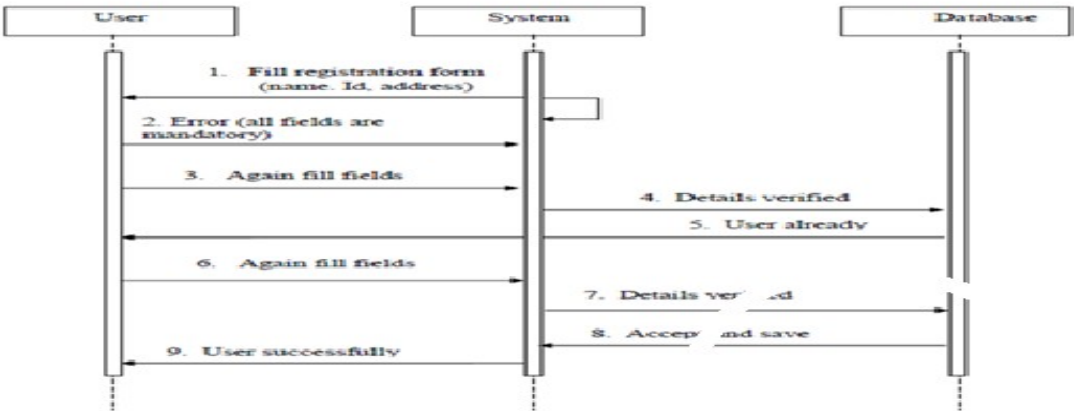
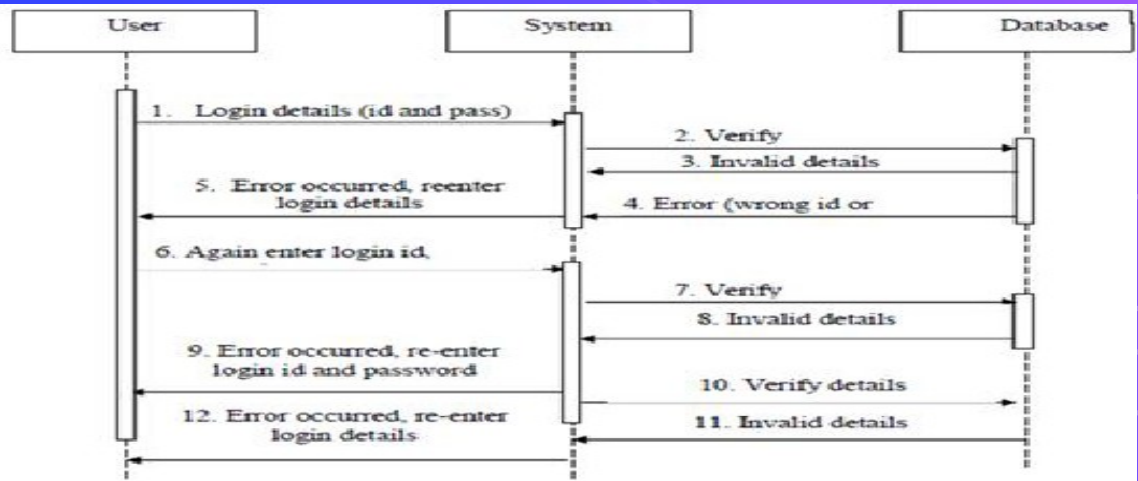
# ACTIVITY DIAGRAM



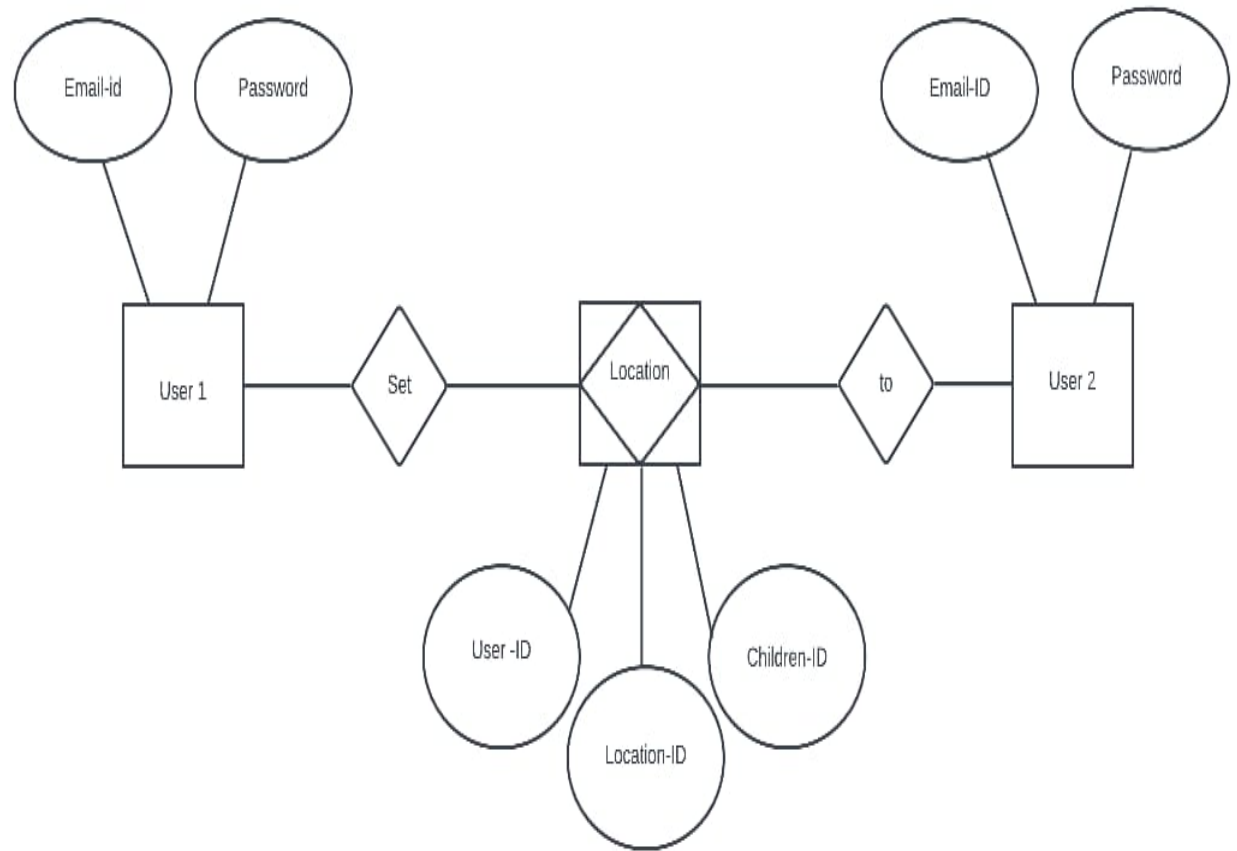
# LOGIN



# SEQUENCE DIAGRAM



# E-R DIAGRAM



# DATA DICTIONARY

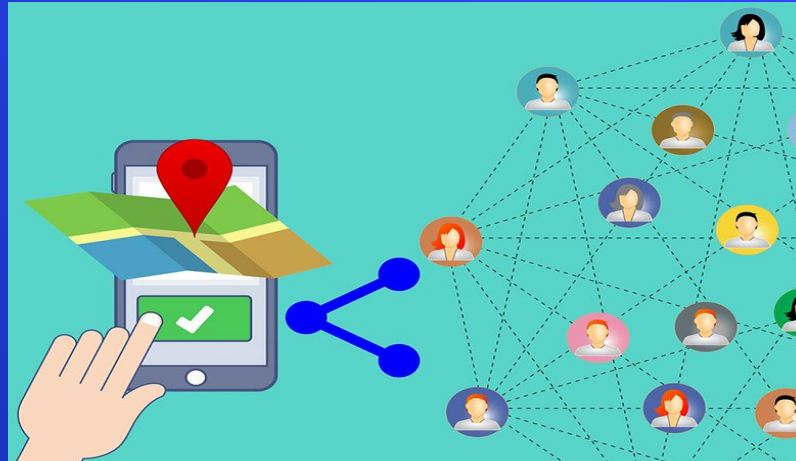
ATTRIBUTE NAME	DATA TYPE	CONSTRAINTS	SAMPLE VALUES
Email-ID	<u>Varchar</u> (50)	Not Null	priya123@gmail.com
Password	<u>Varchar</u> (60)	Check	priya321@gmail.com

ATTRIBUTE NAME	DATA TYPE	CONSTRAINTS	SAMPLE VALUES
Email-ID	<u>Varchar</u> (50)	Primary Key	<del>priya</del> .@gmail.com
Name	<u>Varchar</u> (50)	Not Null	Priya
Mobile Number	<u>Number</u> (20)	Not Null	9750099217
Password	<u>Varchar</u> (50)	Check	Priya123@

ATTRIBUTE NAME	DATA TYPE	CONSTRAINTS	SAMPLE VALUES
Join Code	<u>Number</u> (20)	Check	65783
Create Code	<u>Number</u> (20)	Check	93847

# WORKING

Family locator apps work by finding some other phone using a virtual map. They have an easy-to-use interface and come with GPS technology. Using this technology, people can navigate around, get notifications, speed alerts, and their family's whereabouts. These apps are compatible with both Android and iOS devices. You only need to make sure that the phone has GPS functionality, and is turned on when you need to track . Just install it on your device, sign up, and then install it on your family's device, to enable the tracking.





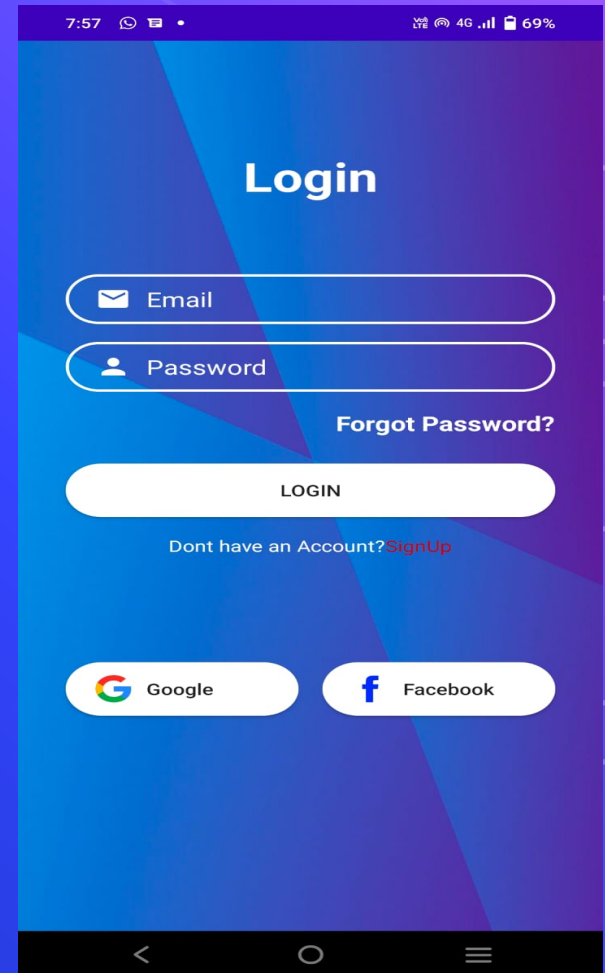
# MODULE DESCRIPTION

- MODULE 1: REGISTRATION
- MODULE 2: LOGIN PAGE
- MODULE 3: CREATE CIRCLE
- MODULE 4: JOIN CIRCLE
- MODULE 5: GET LOCATION

## SPLASH SCREEN



## LOGIN PAGE



# REGISTRATION

7:57

4G

69%

# Register

Username

Email

\*\*\*\*\*

\*\*\*\*\*

REGISTER

Already Have an Account?

# HOME PAGE

7:57

4G

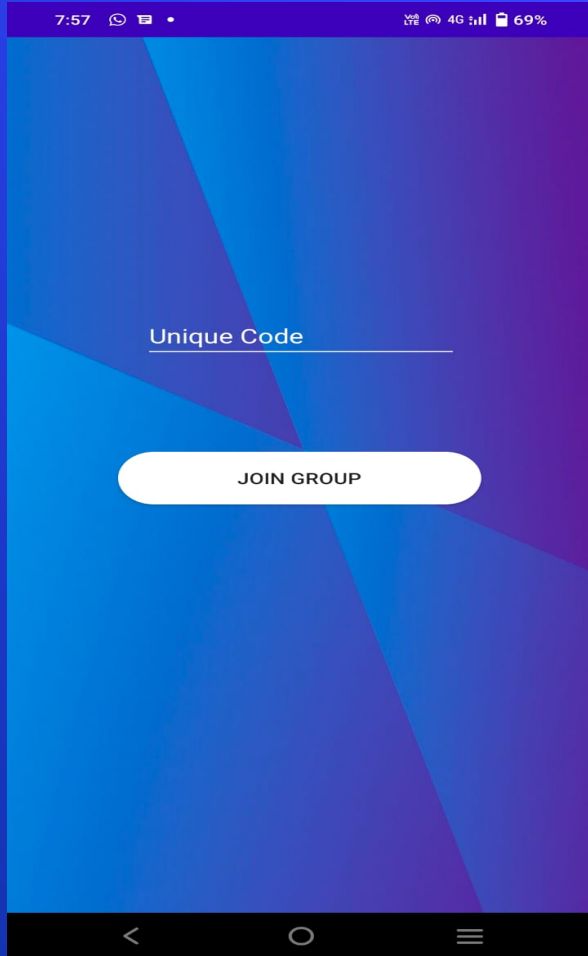
69%

JOIN GROUP

CREATE GROUP

TRACK LOCATION

## JOIN GROUP



7:57 4G 69%

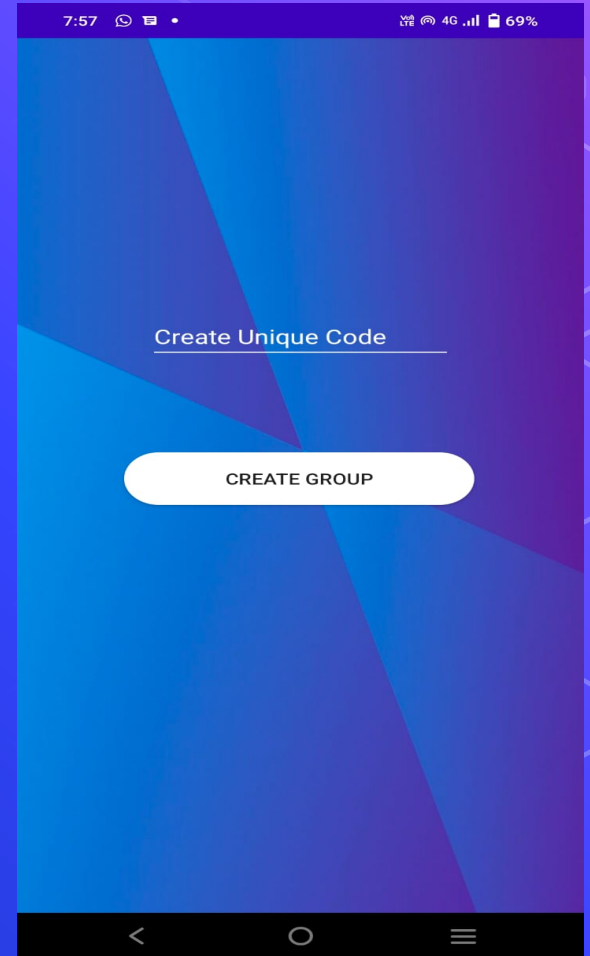
Unique Code

JOIN GROUP

< O ≡

This is a mobile app interface for joining a group. It features a dark blue and purple geometric background. At the top, a status bar shows the time 7:57, 4G signal, and 69% battery. Below the status bar, there is a text input field with the placeholder text "Unique Code". A white rounded rectangular button with the text "JOIN GROUP" is centered below the input field. At the bottom, there is a black navigation bar with three icons: a back arrow, a home circle, and a menu hamburger icon.

## CREATE GROUP



7:57 4G 69%

Create Unique Code

CREATE GROUP

< O ≡

This is a mobile app interface for creating a group. It features a dark blue and purple geometric background. At the top, a status bar shows the time 7:57, 4G signal, and 69% battery. Below the status bar, there is a text input field with the placeholder text "Create Unique Code". A white rounded rectangular button with the text "CREATE GROUP" is centered below the input field. At the bottom, there is a black navigation bar with three icons: a back arrow, a home circle, and a menu hamburger icon.

7:58 4G 69%

Enter Text Here

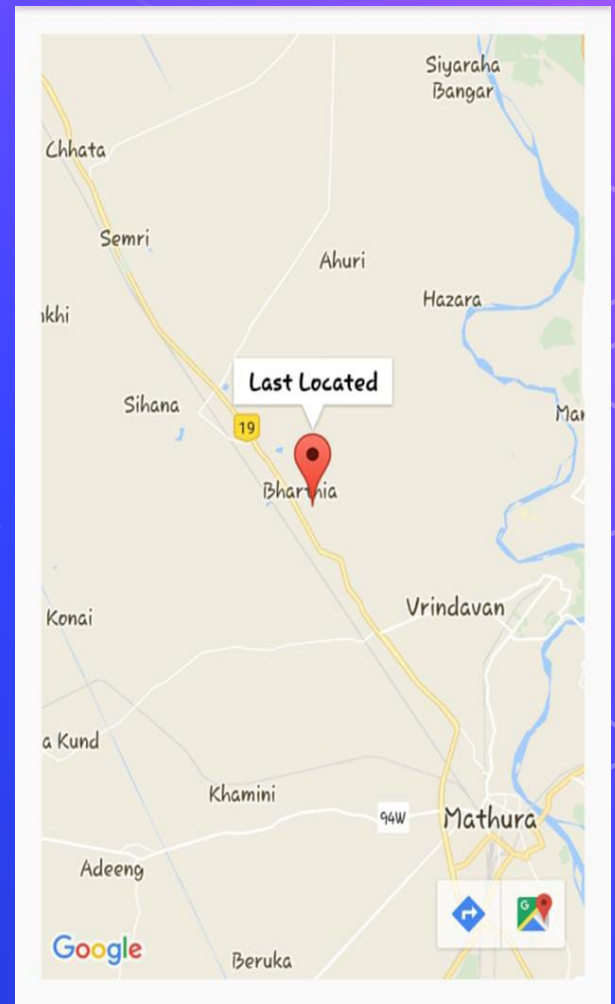
Save

Bharathi

Jayapriya

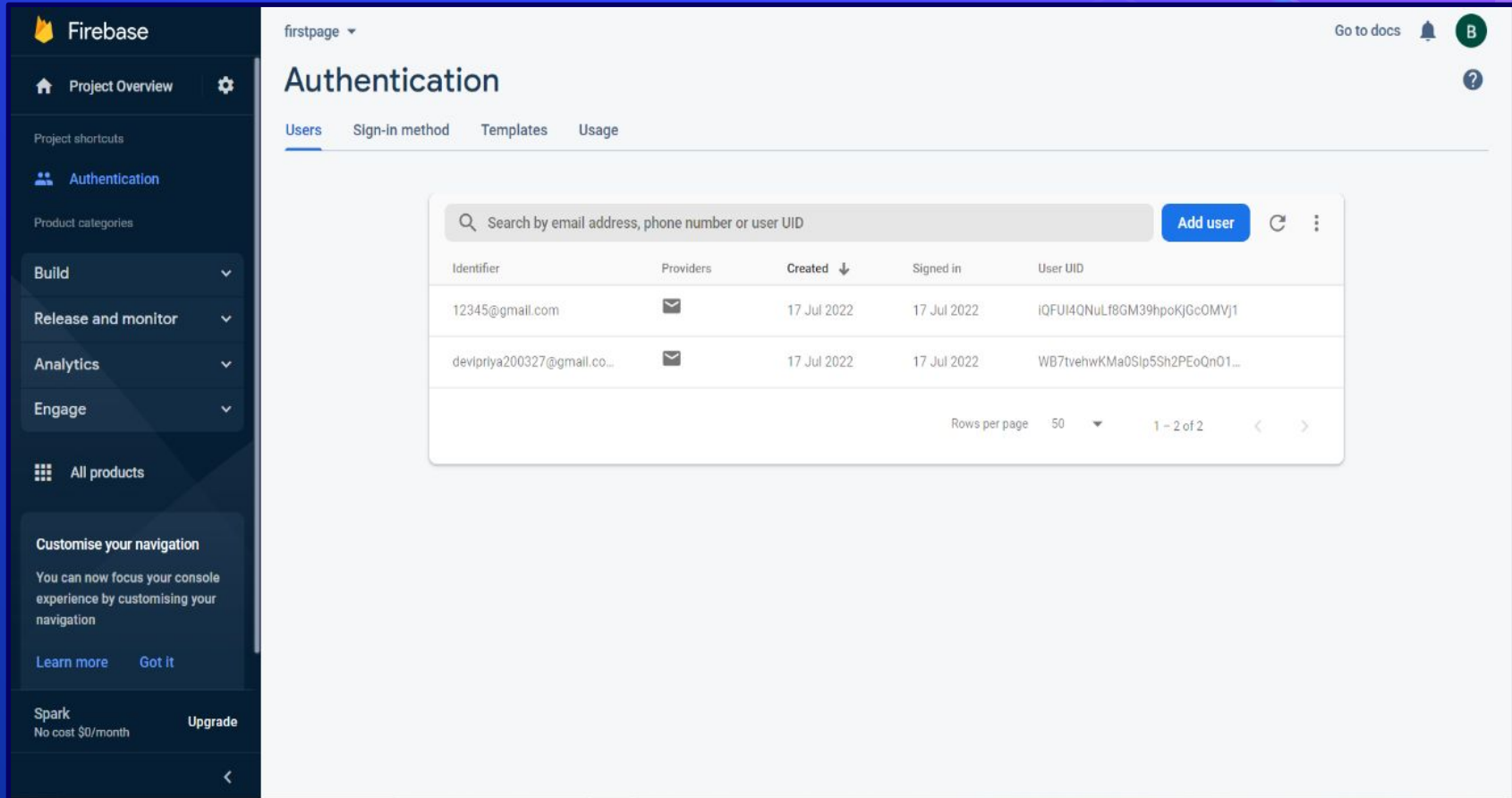
Gajalakshmi

## MEMBERS LIST



## TRACK LOCATION

# FIRE BASE



The screenshot displays the Firebase Authentication console for a project named 'firstpage'. The left sidebar contains navigation links for Project Overview, Authentication, Analytics, Engage, and All products. The main content area is titled 'Authentication' and includes tabs for Users, Sign-in method, Templates, and Usage. The 'Users' tab is active, showing a table of users with columns for Identifier, Providers, Created, Signed in, and User UID. Two users are listed: '12345@gmail.com' and 'devipriya200327@gmail.co...'. The table also includes a search bar, an 'Add user' button, and pagination controls at the bottom.

firstpage ▾

Go to docs 🔔 B ?

## Authentication

Users Sign-in method Templates Usage

Search by email address, phone number or user UID **Add user** ↺ ⋮

Identifier	Providers	Created ▾	Signed in	User UID
12345@gmail.com	📧	17 Jul 2022	17 Jul 2022	iQFUI4QNuLf8GM39hpoKjGcOMVj1
devipriya200327@gmail.co...	📧	17 Jul 2022	17 Jul 2022	WB7tvehwKMa0Slp5Sh2PEoQn01...

Rows per page 50 ▾ 1 – 2 of 2 < >



# PROJECT SPECIFICATION

- ❑ This app is free, fast, and easy to use.
- ❑ Requires sign-up before using.
- ❑ Let you find friends at concert festivals, catch up with family, know the whereabouts of coworkers, and share details of emergency situations, etc.
- ❑ Easily sharable with anyone without installing anything on another person's mobile.
- ❑ It runs in the background, letting you run other apps alongside.
- ❑ It Works globally, and requires a GPS and an internet connection.

# BENEFITS

- ❑ Keeping track of family members, especially in today's world, is a concern for many parents.
- ❑ To know immediately when members leave home, arrive at school or work, etc.
- ❑ Find their stolen or lost phones.
- ❑ Get driving directions and route information.
- ❑ The biggest benefits for families is that the Family Locator app will help you always know where your kids are. This kids mobile tracking means that you can either get agreed-upon updates from your kids about their location, or you can send out location requests so that they will inform you where they are.

# CONCLUSION

In this chapter, the conclusions on the contribution of this research and proposal will be future improvements will be explained . Data Classification for Activity Prediction The feature of Using the Machine Learning Approach has conformed to the objectives of the study test and carry out machine learning processes to trained data and create new based models on trained data. This project involved four phases which are the feasible study and literature review that study the previous research or works. Secondly, the design and methodology phase which includes Waterfall Model, system requirement, process model, data model, and algorithm. This period compulsory for the next step which is implementation, testing, and result. This phase involves the implementation of system design and algorithm that develop the application into a prototype. Lastly, discussion and conclusion to conclude the whole project. This project are to parent can monitor their children everywhere. We also can reduce social phenomena and the safety of the children is awake.

# Thank You!!

