

CHAPTER 1

INTRODUCTION

1.1 SCOPE OF THE PROJECT:

The main reason behind this application is that the students can know more information about the college and what's going on – upcoming events, any cultural programs, the student activities, sports, and about the examination complete details.

MVGR conducts many events like Flash mobs, KITAB, Blood donation campaign, NSS, Guiding villagers on the name of “LEAD MVGR” and many more. So, to the updates, time, place, when, where it is going to happen, the complete details can be updated in this media. This media can be one of the best examples like FACEBOOK and INSTAGRAM. Every department conducts many events – like for example CSE conducts workshops, Civil conducts Sports, ECE conducts Essay Writing competitions, and many other departments have many more ideas. So, for this purpose instead of going and announcing or using of notice boards may not reach everyone. So, for this purpose students can post the events what the department conducts in this media. Students are also supposed to post the workshops updates or PPT updates which will be conducted in other colleges.

1.2 FEATURES OF THE APPLICATION:

1)Messaging platform: In which users can actively send messages in personal or in groups. In this the users who wants to chat needs to send requests to each other and should be accepted from both sides. This feature is more secured in this application than any other.

2)Make a call: In this user can simply dial the contact number and hit the phone icon to make a call. It goes like a normal phone call.

3)Whether: In this one can know the current temperature in Fahrenheit and Celsius of any place. In addition to this Relative Humidity, Dewpoint, Visibility, Heat Index were also known.

4)Search Buddies: User can also search friends and can send requests. It displays and suggests the list of all users who are using this application and makes easy for the user to identify friends easily.

5)Profile: In this user can perform check his/her user profile details like profile picture, nickname, phone number etc. And update operation can also be performed.

6) Sending posts: In this user can send their feeling and message to share with all the users through posting it with images and notifications details can reach everyone simply at on click.

7)Send Friend Requests: In this app we can send request to others for becoming friends socially. We can also accept or decline the requests with one single click on the button.

8)Group Chat: We can group chat with our friends also, but admin of the group has the complete permissions to add member, remove member, group info, cancel options to perform different actions. But members has only two features they can leave a group, know the group info and group members only. It will be very interesting to chat with our friends while discussions, we have divided the user messages and the friend's messages separately.

9)Personal Chat: In this functionality requested friends to accept the request and add them as friends and chat personally more interactive way. In future we are planning to have very secure social connection between the users.

CHAPTER 2

SOFTWARE REQUIREMENT SPECIFICATION

2.1 REQUIREMENT SPECIFICATION:

2.1.1 Purpose

2.1.1.1 The purpose of this SRS is to develop the requirements for MVGR SOCIAL MEDIA.

2.1.1.2 The intended user is any student belonging to MVGR College who can receive and post the updates in the application.

2.1.1.3 The focus of application is to be chatting, Group chatting and posting the news to all can access through their authenticated account.

2.1.2 Scope

2.1.2.1 The product is titled as MVGR SOCIAL MEDIA.

2.1.2.2 The product will perform the following tasks

2.1.2.2.1 Posting the updates.

2.1.2.2.2 Receive the posts by our collegemates.

2.1.2.2.3 Contact any student belonging to any department via message through this application.

2.1.2.2.4 It will work on the Google firebase cloud database to store and remove data.

2.2 FUNCTIONAL REQUIREMENTS:

2.2.1. OPERATIONS

2.2.1.1 Receive posts that is been updated.

2.2.1.2 Sending posts to the users (i.e., post the updates).

2.2.1.3 Can send the messages to the individuals belonging to any department by using the concept of chatting and group chatting.

2.2.1.4 Post the videos, images, posters and many more.

2.2.1.5 they can check the weather details of entered city and state.

2.2.1.6 Users can make phone calls directly from our app.

2.2.2 Product Functions

2.2.2.1 Can come to know about the updates of the college.

2.2.2.2 Search the student belonging to any department by entering Nicknames in the search box.

2.2.2.3 Student can post the updates and receive the updates.

2.2.2.4 The application validates the user by authenticating the student's email Id and password.

2.2.2.5 After the validation of the user, the student can view the notifications, updates and many more.

2.2.2.6 After his observation the user can sign out from the application.

2.3 NON-FUNCTIONAL REQUIREMENTS:

2.3.1 Performance:- considering the daily used social media networks this MVGR SOCIAL MEDIA is also as performable as routine media's. Here the ionic and firebase framework as they were usage of cloud.

2.3.2 Scalability:- As this is done in the base of ionic this is used at mobile platform and web applicable too. This is easy scalable at both the platforms.

2.3.3 Reliability:- This is the application done for multitasking performances and mostly reliable for the mobile and web platforms.

2.3.4 Maintainability:- The database is firebase and the storage is done on the cloud and user are easily detected too. And the process of deletion is also made easy in the database.

2.3.5 Availability:- Most of the recent technologies under matter of security are done on the cloud and it is all available everywhere as usually like MVGR SOCIAL MEDIA can be avail.

2.3.6 Capacity:- The capacity of this application is based on the cost that can be effort by the dealers , because it is made on the cloud and can buy the storage form that.

2.3.7 Security:- As under the layer of students level the security authentication is processed with mail id's and the server is protected in the could we usually know the security levels.

2.4 HARDWARE SPECIFICATIONS:

2.4.1) HARDWARE INTERFACE

2.4.1.1) HARD DISK: The database connectivity requirements hardware configuration that is on-line. This makes it necessary to have a fast data base system running on higher rpm hard disk permitting complete data redundancy and back-up systems to support the primary goal of reliability.

2.4.1.2) The system must interface with the standard output device, keyboard and mouse to interact with this software.

2.5 SOFTWARE SPECIFICATIONS:

2.5.1 FRONT – END DESCRIPTION :

MVGR SOCIAL MEDIA is an Android/IOS application which is developed on the platform called “IONIC 3”. In this application the students have to register using the his/her email Id card and then they have to set a password. As soon as the student logs into the application, the entire updates that is been uploaded by the other department students can be observed. If the user wants to post any information he/she can do that by clicking on the button called publish which contains the information or video or image or a poster or an attachment. Thus, THIS MEDIA BRINGS ENTIRE MVGR STUDENTS INTO ONE COMMUNITY.

2.5.2 BACK – END DESCRIPTION

Firebase helps you develop high-quality apps and grow your business. Each product works independently, and they work even better together.

Firebase Cloud Messaging. Formerly known as Google Cloud Messaging (GCM), Firebase Cloud Messaging (FCM) is a cross-platform solution for messages and notifications for Android, iOS, and web applications, which currently can be used at no cost.

CHAPTER 3

SYSTEM STUDY AND ANALYSIS

3.1 OBJECT ORIENTED DESIGN:

3.1.1 USE CASE DIAGRAM

Use case diagrams are usually referred to as **behaviour diagrams** used to describe a set of actions (**use cases**) that some system or systems (**subject**) should or can perform in collaboration with one or more **external users** of the system (**actors**). Each use case should provide some observable and valuable result to the actors or other stakeholders of the system.

Use case diagrams are in fact twofold - they are both **behaviour diagrams**, because they describe behaviour of the system, and they are also **structure diagrams** - as a special case of class diagrams where classifiers are restricted to be either **actors** or use cases related to each other with **associations**.

Major elements of the MVGR Social Media's use case diagram are shown on the picture below. Note again, both business use case as well as business actor are not defined in UML standard, so you will either need to use some UML tool supporting those or create your own business modelling stereotypes.

Coming to or part of the application this make use of the application the manner User make use of and the actors involved be the member on both admin side and the user side. The use cases are the one acting in between the actor and the indirect system administrator's.

The follow we used the are relations are use and the (include) relations made to be mandatory that an user must give to make use of the application.

The points straight forward are explained as:

1. User needs a Registration.
2. Make a unique Email Id, Mobile Number.
3. Uploading the pictures done by the user.
4. Authenticating the post done by the admin.
5. Request can send by the user.

6. Request authenticating is proceeded by the admin.
7. Users can chat each other.
8. Chatting process validate by the accepting user requests.

The below use case diagram is going to explain the outlook of the application working process and the manner it behaves with user too. This is also includes the mandatory files or input to the users. The actor be the one who should monitor or to be applied updates in the individual blogs. System use case be the matter how our database be working and making modules with each individual however that can be a part of the Component diagram.

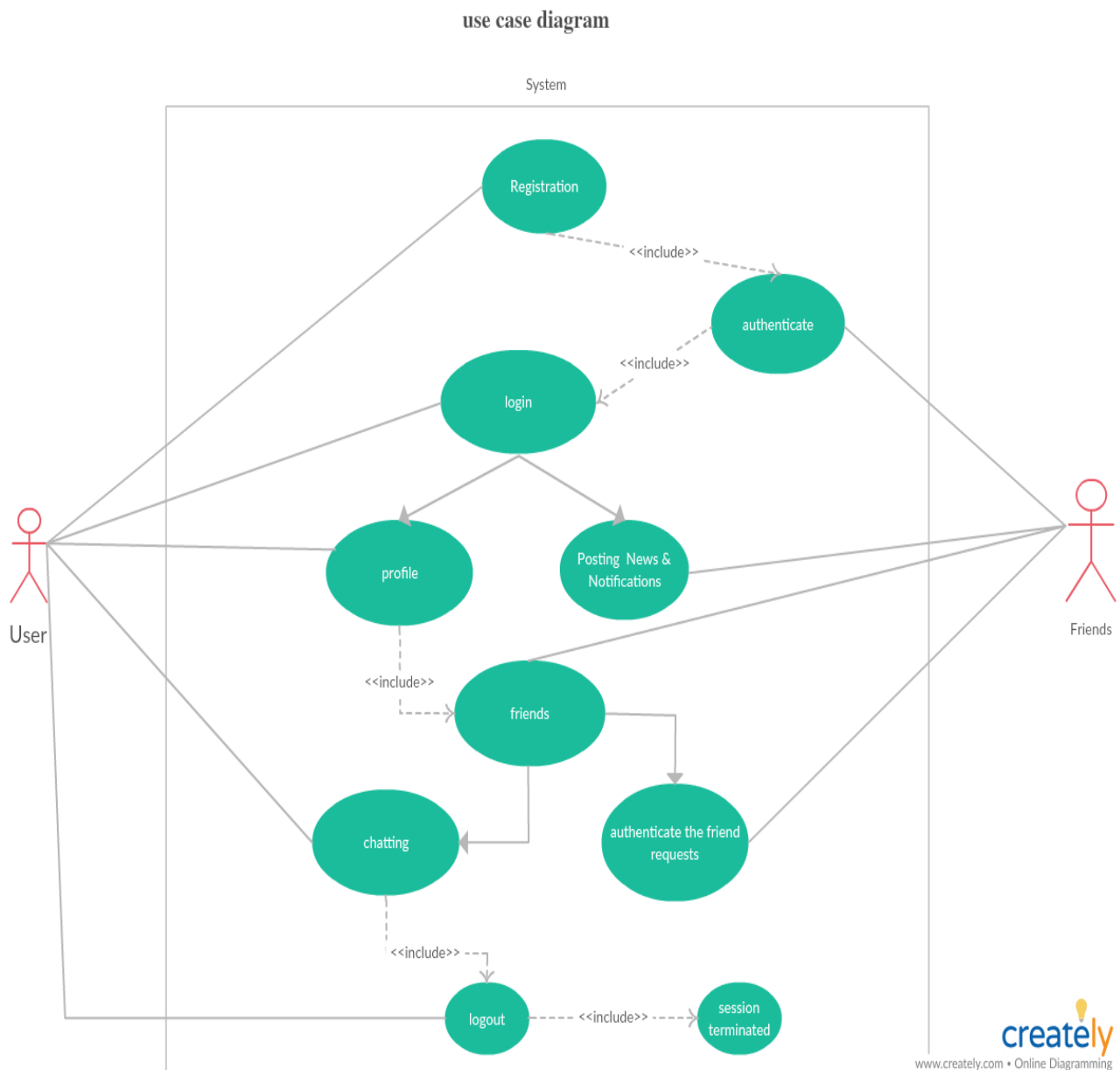


Fig 3.1 (Use Case Diagram)

3.1.2 CLASS DIAGRAM

A **class diagram** in the [Unified Modelling Language](#) (UML) is a type of static structure diagram that describes the structure of a system by showing the system's [classes](#), their attributes, operations (or methods), and the relationships among objects.

The class diagram is the main building block of [object-oriented](#) modelling. It is used for general [conceptual modelling](#) of the systematic of the application, and for detailed modelling translating the models into [programming code](#). Class diagrams can also be used for [data modelling](#). The classes in a class diagram represent both the main elements, interactions in the application, and the classes to be programmed.

In the diagram, classes are represented with boxes that contain three compartments:

- The top compartment contains the name of the class. It is printed in bold and centered, and the first letter is capitalized.
- The middle compartment contains the attributes of the class. They are left-aligned and the first letter is lowercase.
- The bottom compartment contains the operations the class can execute. They are also left-aligned and the first letter is lowercase.

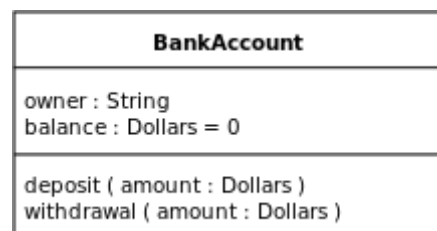


Fig 3.1.2

In the design of a system, a number of classes are identified and grouped together in a class diagram that helps to determine the static relations between them. With detailed modelling, the classes of the conceptual design are often split into a number of subclasses.

Well coming to our MVGR Social Media Application the main class is the User class which consists of

[Class USER](#)

[Attributes](#) Userid, emailed, phoneno

Operations done on this are

Getuserdetails();

Getemailid();

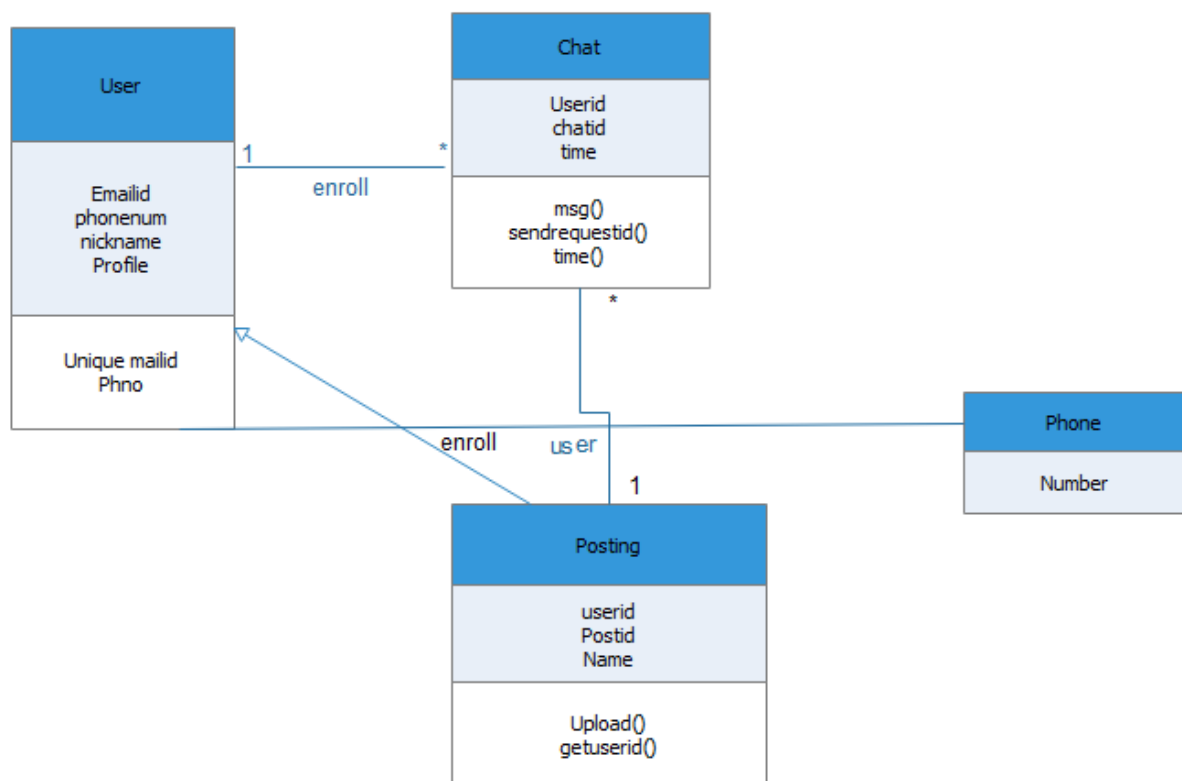


Fig 3.1.3(Class Diagram)

3.1.3 SEQUENCE DIAGRAM

Sequence diagram is, it's important to know the role of the [Unified Modelling Language](#), better known as UML. UML is a modelling toolkit that guides the creation and notation of many types of diagrams, including behaviour diagrams, interaction diagrams, and structure diagrams.

A sequence diagram is a type of interaction diagram because it describes how—and in what order—a group of objects works together. These diagrams are used by software developers and business professionals to understand requirements for a new system or to document an existing process. Sequence diagrams are sometimes known as event diagrams or event scenarios.

Note that there are two types of sequence diagrams: UML diagrams and code-based diagrams. The latter is sourced from programming code and will not be covered in this guide. Lucid chart's [UML diagramming software](#) is equipped with all the shapes and features you will need to model both.

Well the name itself describe the usage of the sequence diagram and the process how the application works on and the means of the sequential process it undergoes from the start of the app. We took the main modules the six in the describing the application and its sequential manner as follow:-

1. New User Approval.
2. Authentication
3. Posting
4. Adding friends
5. Requesting friends
6. Chatting process.

The below diagram show the how the above modules are in the processing way and the how the requesting from one another in the maintained. The message calls and the requesting tools are used for the process and the to attempt the further protocols.

User makes the requests and in the same process the system call can be made under the programming the manner such way the application is processed in the programmatic way the

developer is schedule. This manner is briefly explained under system sequence diagram over loaded in the way. This only explains about the User level process and the manner it works at point of the user sight.

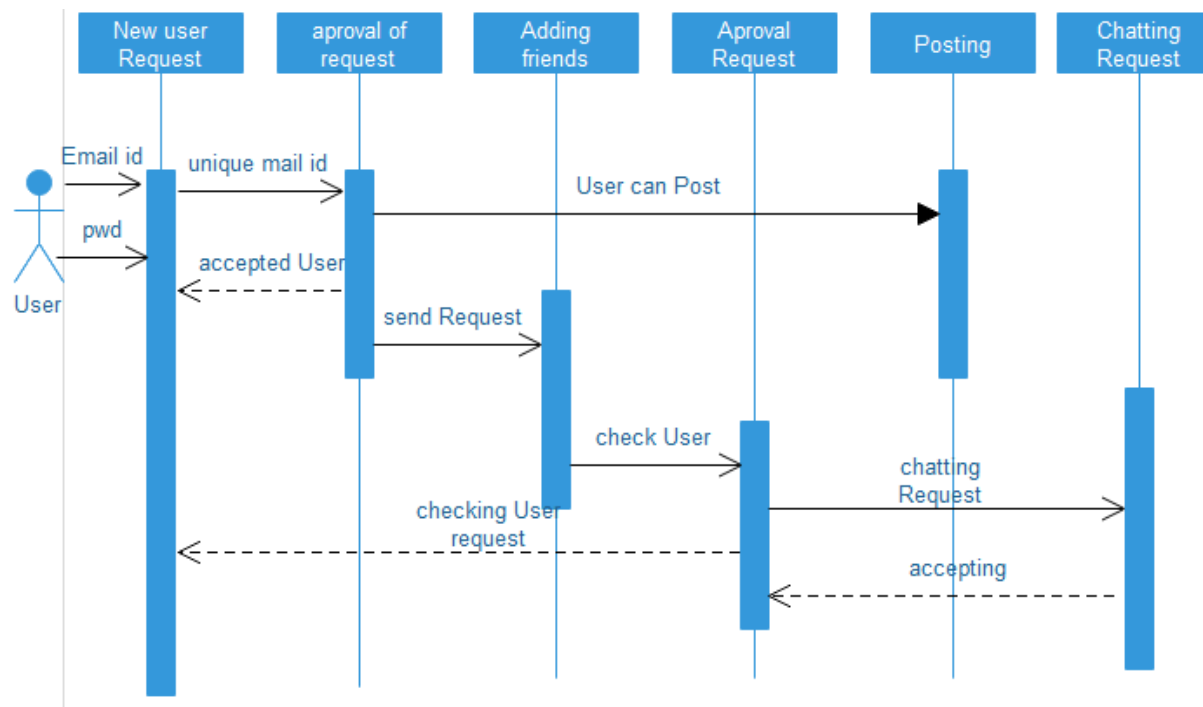


Fig 3.1.3(Sequence Diagram)

3.2 ENTITY RELATIONSHIP MODEL

An **entity relationship diagram** (ERD) is a representation of data within a domain. It consists of entities as well as relationships between entities.

An entity can be a tangible, physical object such as a school or student, or a concept such as a reply or a transaction. Entity can be identified by extracting objects that are relevant and meaningful to the problem domain and the system to develop. In entity relationship modelling, the term entity has synonyms "table", "database table", "entity-type". Yet, entity is the most commonly used term. Each entity brings along a set of columns, which are the properties of the entity the attributes belong to. For instance, entity Student has name, address and grade as columns (synonyms: attributes, properties, fields). Every entity must have at least one attribute that can be used to uniquely identify the entity, which is known as the entity's **primary key(s)**.

Relationships are capable in linking up entities. Typical examples: one-to-one, one-to-many, many-to-many. The proper use of relationship is important in showing HOW entities are related. For instance, one-to-many relationship must be used for modelling the fact that 'one school has many students'.

Generally we are used the firebase cloud storage for the storing our data so, that we have designed the database as tree structure format. So, all the data in the cloud is based on the user unique id. Following diagram/screenshot represents the data tree structure we have used as follows (fig3.2).

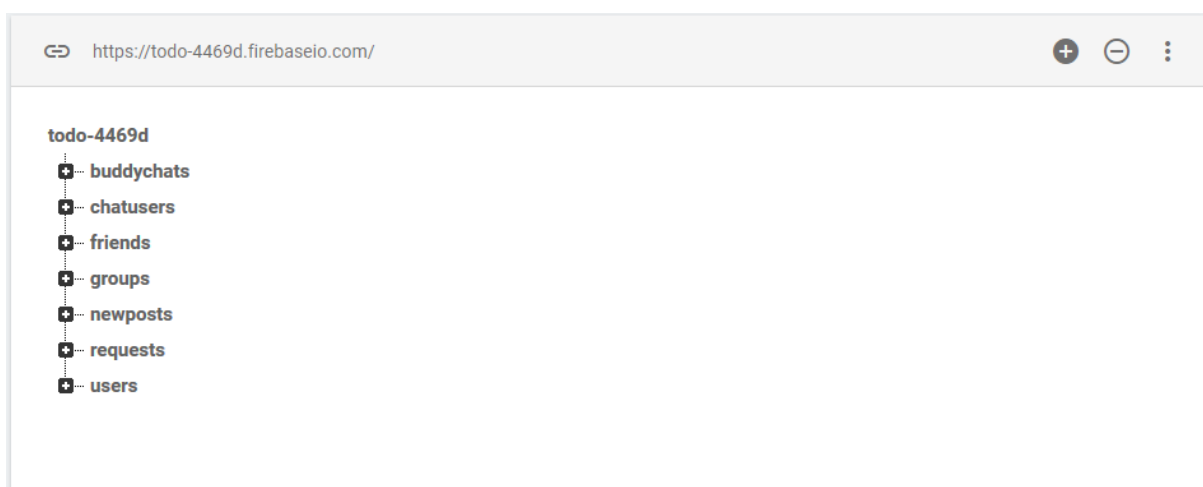


Fig3.2.1(Tables)

Following figure Fig 3.2.2 represents the buddy chats table tree structure.

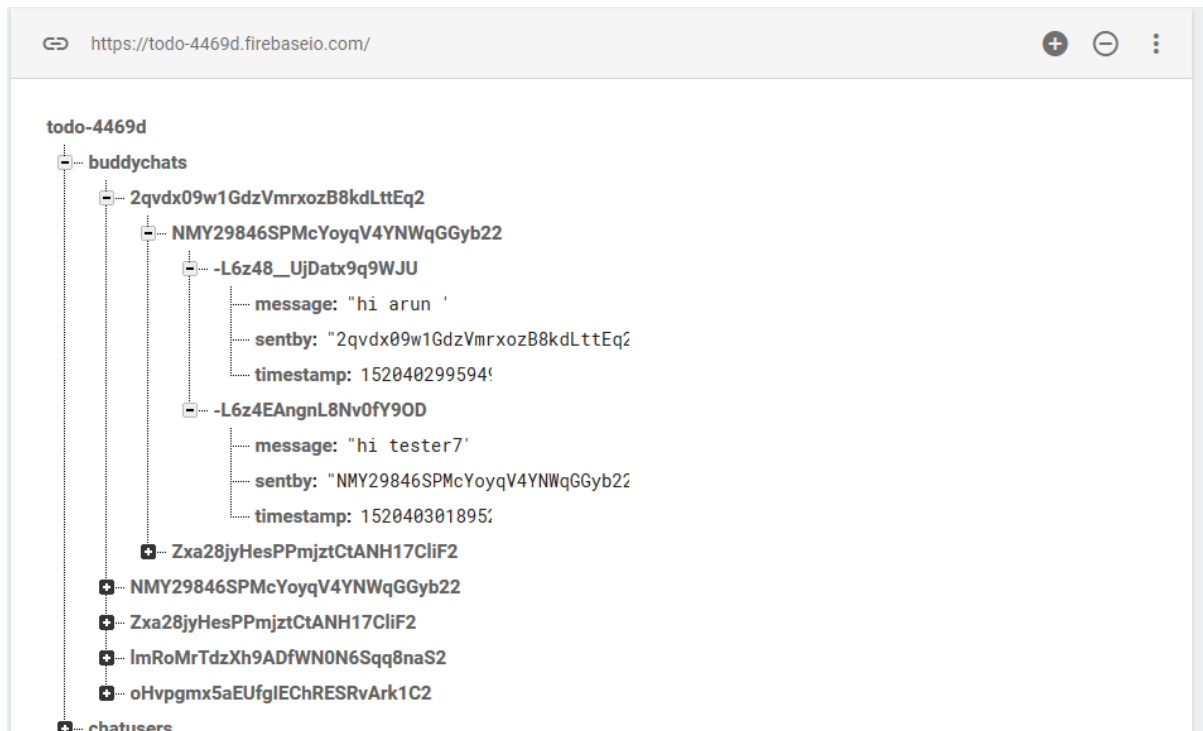


Fig 3.2.2(Buddychats Table)

Following figure Fig 3.2.3 represents the friends table tree structure.



Fig 3.2.3(Friends Tables)

Following figure Fig 3.2.4 represents the chat users table tree structure.



Fig 3.2.4(Chat users Tables)

Following figure Fig 3.2.5 represents the requests table tree structure.



Fig 3.2.5

Following figure Fig 3.2.6 represents the groups table tree structure.



Fig 3.2.6

Following figure Fig 3.2.7 represents the users table tree structure.



Fig 3.2.7

Following figure Fig 3.2.8 represents the new posts table tree structure.

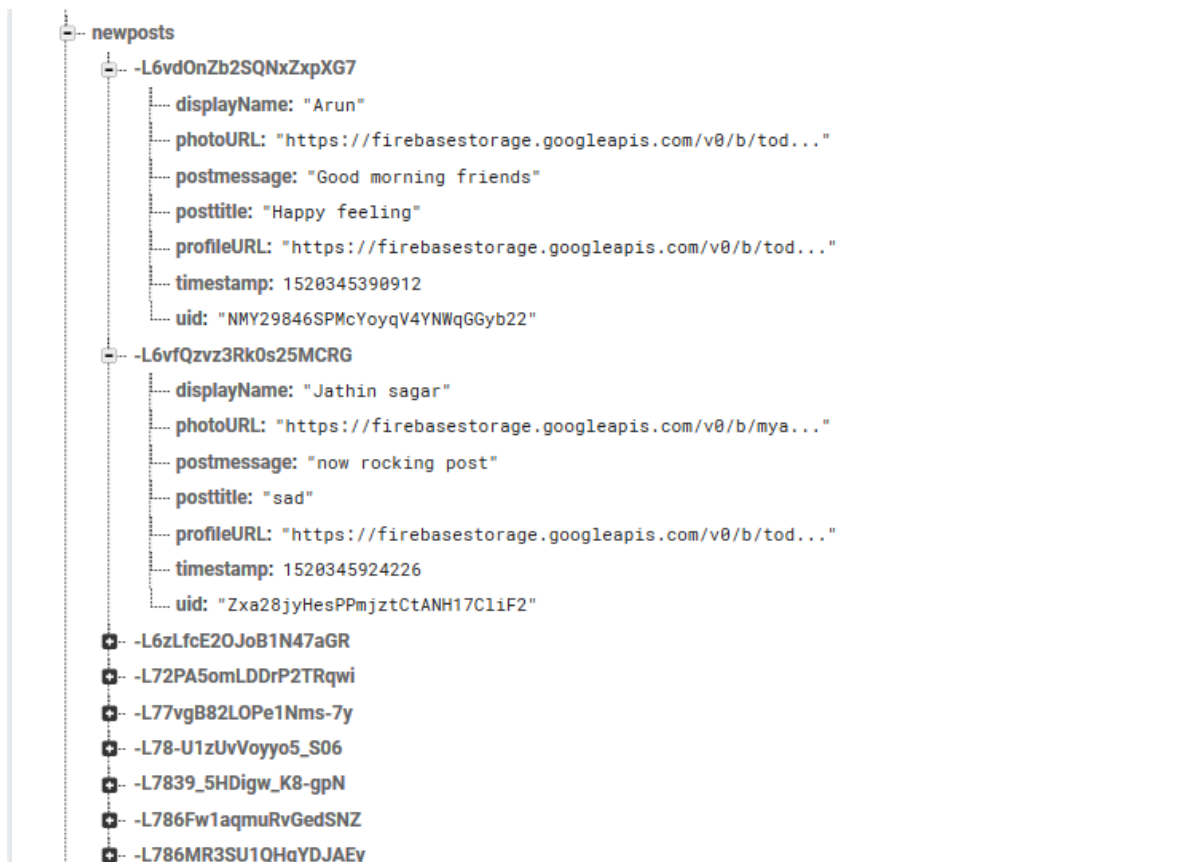
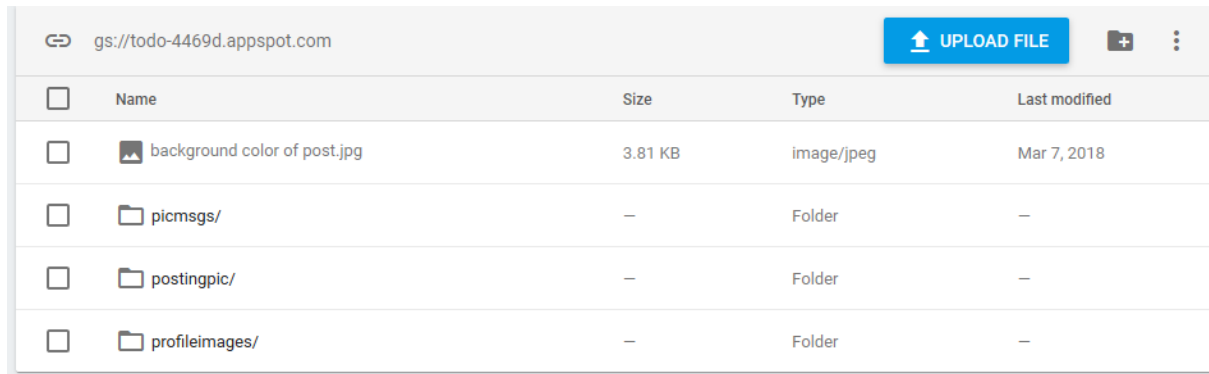


Fig 3.2.8

Below screenshot (figure 3.2.9) is for storing the pictures in the data base of fire store.



The screenshot shows the Google Cloud Storage interface for the bucket 'gs://todo-4469d.appspot.com'. It features a table with columns for Name, Size, Type, and Last modified. The table contains one file, 'background color of post.jpg', and three folders: 'picmsgs/', 'postingpic/', and 'profileimages/'. An 'UPLOAD FILE' button is visible in the top right corner.





<input type="checkbox"/>	Name	Size	Type	Last modified
<input type="checkbox"/>	 background color of post.jpg	3.81 KB	image/jpeg	Mar 7, 2018
<input type="checkbox"/>	 picmsgs/	—	Folder	—
<input type="checkbox"/>	 postingpic/	—	Folder	—
<input type="checkbox"/>	 profileimages/	—	Folder	—

Fig 3.2.9

CHAPTER 4

UNDERLYING TECHNOLOGIES

4.1 IONIC FRAMEWORK



Ionic is a complete open-source SDK for hybrid mobile app development. The original version was released in 2013 and built on top of AngularJS and Apache Cordova. The more recent releases, known as Ionic 3 or simply "Ionic", are built on Angular.

4.2 ANGULAR CORE



Angular is a platform that makes it easy to build applications with the web. Angular combines declarative templates, dependency injection, end to end tooling, and integrated best practices to solve development challenges. Angular empowers developers to build applications that live on the web, mobile, or the desktop.

4.3 HTML/CSS/JS

HTML:



Hypertext Markup Language is the standard markup language for creating web pages and web applications. With Cascading Style Sheets and JavaScript, it forms a triad of cornerstone technologies for the World Wide Web.

CSS:



- **CSS** stands for **Cascading Style Sheets**
- CSS describes **how HTML elements are to be displayed on screen, paper, or in other media**
- CSS **saves a lot of work**. It can control the layout of multiple web pages all at once
- External stylesheets are stored in **CSS files**.

JAVASCRIPT:

JavaScript, often abbreviated as JS, is a high-level, interpreted programming language. It is a language which is also characterized as dynamic, weakly typed, prototype-based and multi-paradigm.



- JavaScript is one of the **3 languages** all web developers **must** learn:
 1. **HTML** to define the content of web pages
 2. **CSS** to specify the layout of web pages
 3. **JavaScript** to program the behavior of web pages.

4.4 TYPE SCRIPT

By definition, “TypeScript is JavaScript for application-scale development.” TypeScript is a strongly typed, object oriented, compiled language. It was designed by **Anders Hejlsberg** (designer of C#) at Microsoft. TypeScript is both a language and set of tools. TypeScript is a typed superset of JavaScript compiled to JavaScript. In other words, TypeScript is JavaScript plus some additional features.

CHAPTER 5

IMPLEMENTATION

5.1 OPERATIONS INVOLVED:

- “MVGR SOCIAL MEDIA” is a mobile application which is used by for the students of MVGR.
- In this application students are authenticated with their email Id’s and the password.
- The main reason behind this application is that the students can know more information about the college and what’s going on – upcoming events, any cultural programs, the student activities, sports, and about the examination complete details.
- The main idea behind is to unite the MVGR students at one platform to know the updates going in college.
- The focus of application is to be chatting, Group chatting and posting the news to all can access through their authenticated accounts.
- We just also wanted to work with APIs so, we have created sub module of the weather details based on the city and state.

Operations :

- The software allows following operations like
- Receive posts that is been updated.
- Sending posts to the users (i.e., post the updates).
- Can send the messages to the individuals belonging to any department by using the concept of chatting and group chatting.
- Post the videos, images, posters and many more.
- they can check the weather details of entered city and state.
- Users can make phone calls directly from our app.
- They can also play music through our app with in the local files.

5.2 PRE-REQUISITES:

The following installations will need to be completed for this application to be run successfully,

- Node JS and NPM installed

- Cordova
- Ionic Framework
- Text editor (Visual Studio Code is preferable)

Technology Involved:

- Ionic 3 Framework
- Cordova
- HTML / CSS / JS
- Typescript
- Angular

1 | Create a new Ionic project

To create/start a new project in Ionic 2 framework, we need to give a below Command

ionic start <application name> <starter template name>

ionic start mvgrsocialmedia blank

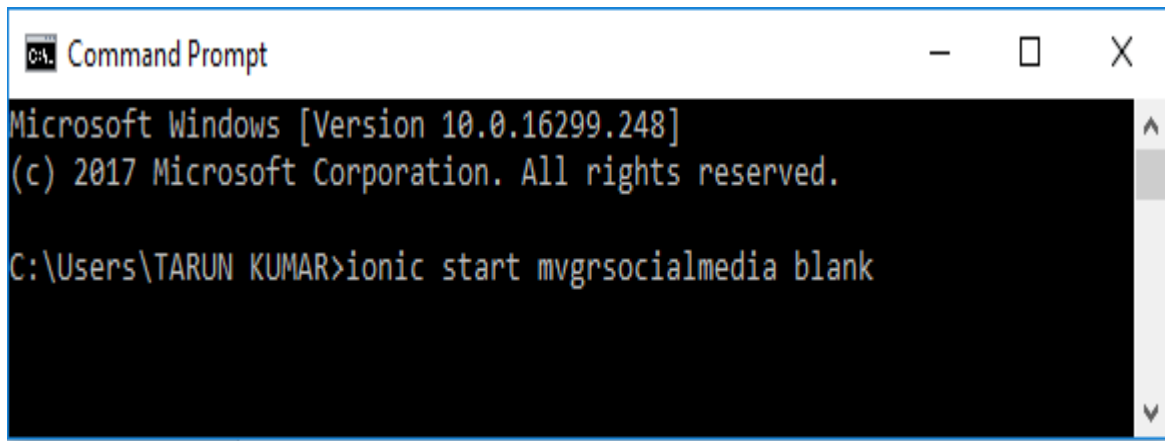
We will be having following starter templates in ionic 2 framework.

- Tabs : A starting project with a simple tabbed interface
- Blank : A blank starter project
- Sidemenu: A starting project with a side menu with navigation in the content area
- super: A starting project complete with pre-built pages, providers and best practices for Ionic development.
- Conference: A project that demonstrates a real world application
- Tutorial: A tutorial based project that goes along with the Ionic documentation
- AWS: AWS Mobile Hub Starter

In this app we are going to use blank template and start implementing the actual application.

ionic start mvgrsocialmedia blank

Give the above command in the command prompt as shown in the below figure 5.1.



```
Command Prompt
Microsoft Windows [Version 10.0.16299.248]
(c) 2017 Microsoft Corporation. All rights reserved.

C:\Users\TARUN KUMAR>ionic start mvgrsocialmedia blank
```

Fig 5.1(Initializing App)

Once you give the above command, the ionic application will be created with the following folder structure as shown in the figure 5.2.

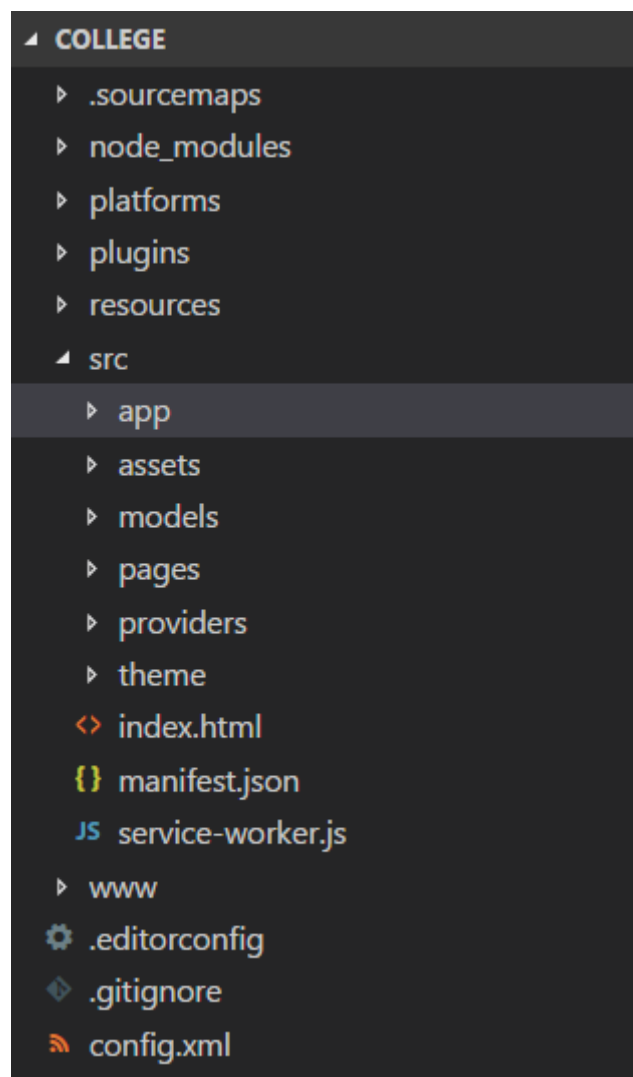


Fig 5.2(File Structure)

2 | Running the application

Before going to give run command, we need to route to the current application folder and then give the following commands.

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Run on Browser,

ionic serve

Run on Mobile simulator,

ionic serve --lab

If you run the application on browser, you can see the output as shown in the below Figure fig 5.3

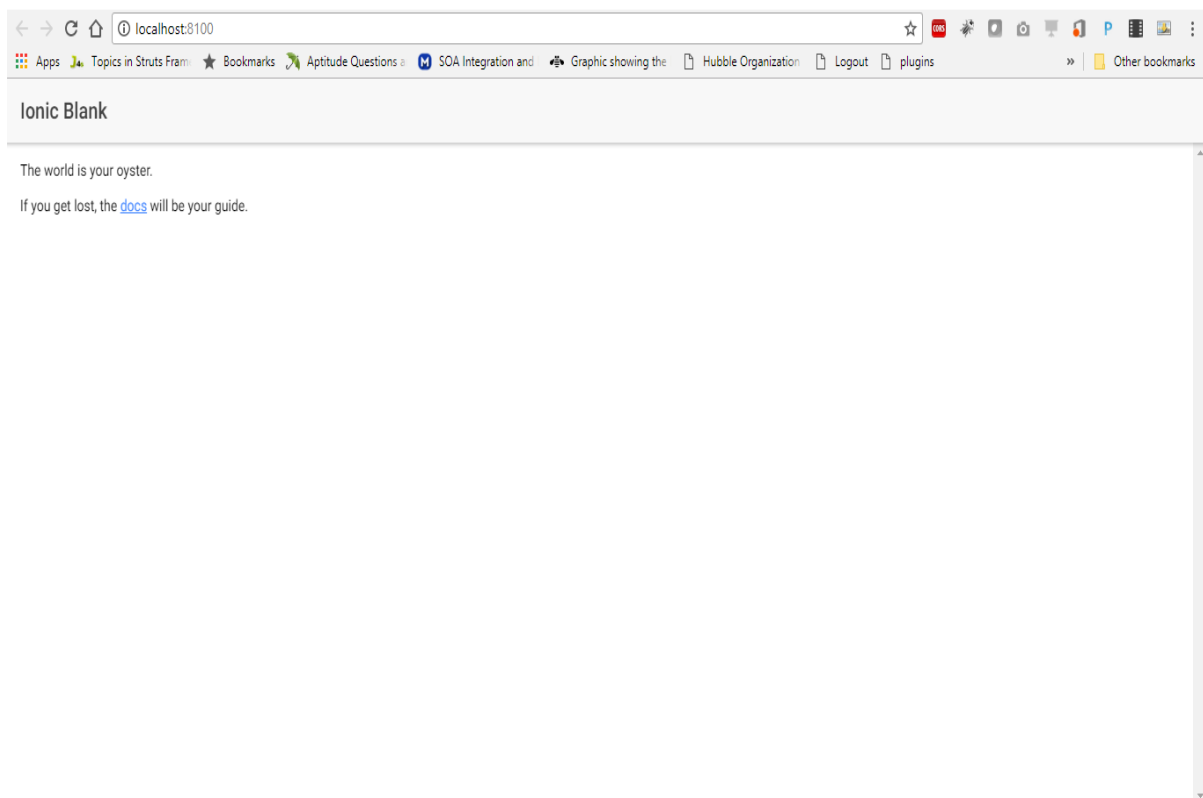


Fig 5.3(Running an App)

If you run the application on mobile browser simulator, you can see the output as shown in the below figure fig 5.4. Here if you observe you can see the output in two different platforms one is Android and another one is IOS.

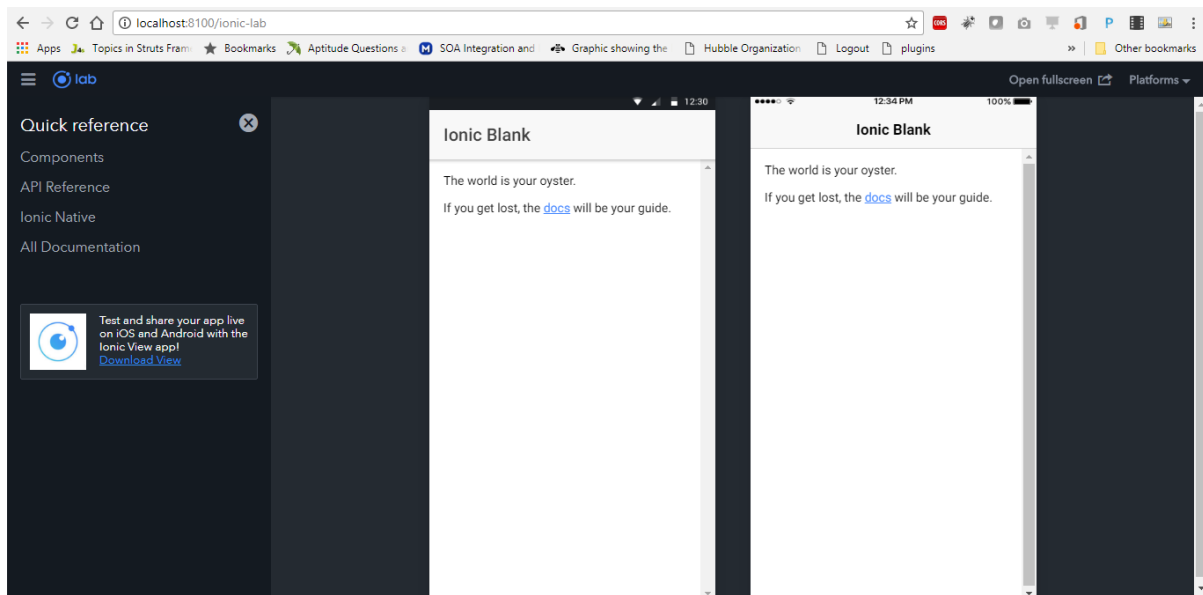


Fig 5.4(Default Page)

CHAPTER 6

TESTING

6.1 TEST SCENARIOS:

TEST CASE ID	TEST STEP	DESCRIPTION	TEST DATA	EXPECTED RESULT	ACTUAL RESULT	STATUS
TC01	Validation of password	Enter 8 character alpha numeric password	Batch	Valid Password	Invalid Password	FAIL
TC02	Validation of password	Enter 8 character alpha numeric password	12345678	Sign up failed	Invalid Password	PASS
TC03	Validation of password	Enter 8 character alpha numeric password	Batch14	Account created	Account Created	PASS
TC04	Validation of phone call	Enter a 10 digit mobile number	9848698	Valid mobile number	Invalid Mobile n number	PASS
TC05	Validation of phone call	Enter a 10 digit mobile number	9848998489	Valid mobile number	Connect call	PASS
TC06	Validation of email	Enter valid email address	Royalrocksgmail.com	Invalid email	Invalid	FAIL
TC07	Validation of email	Enter valid email address	royalrocks@gmail.com	Valid email address	Valid	PASS
TC08	Validation of Notifications	Send Posts	Message not displayed on home screen	Invalid post. Post again	Invalid	FAIL
TC09	Validation of Notifications	Send Posts	Message displayed on home screen	Successful post	Post is updated	PASS
TC10	Validation of Friend request	Send request to friend	Request not accepted	Messages will not be displayed	You are not the friend	PASS
TC11	Validation of Friend Request	Send request to friend	Request accepted	Messages will be displayed	Start chatting	PASS
TC12	Weather Report	Enter the city and state with correct spelling	Vishakapatnam , AP	Invalid city	Weather conditions will not displayed	FAIL

TC13	Weather Report	Enter the City and State with correct spelling	Vishakapatnam , AP	81 degrees(Fahrenheit)	Weather conditions will be displayed	PASS
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CHAPTER 7

RESULT

App icon :



Fig 7.1(App Logo)

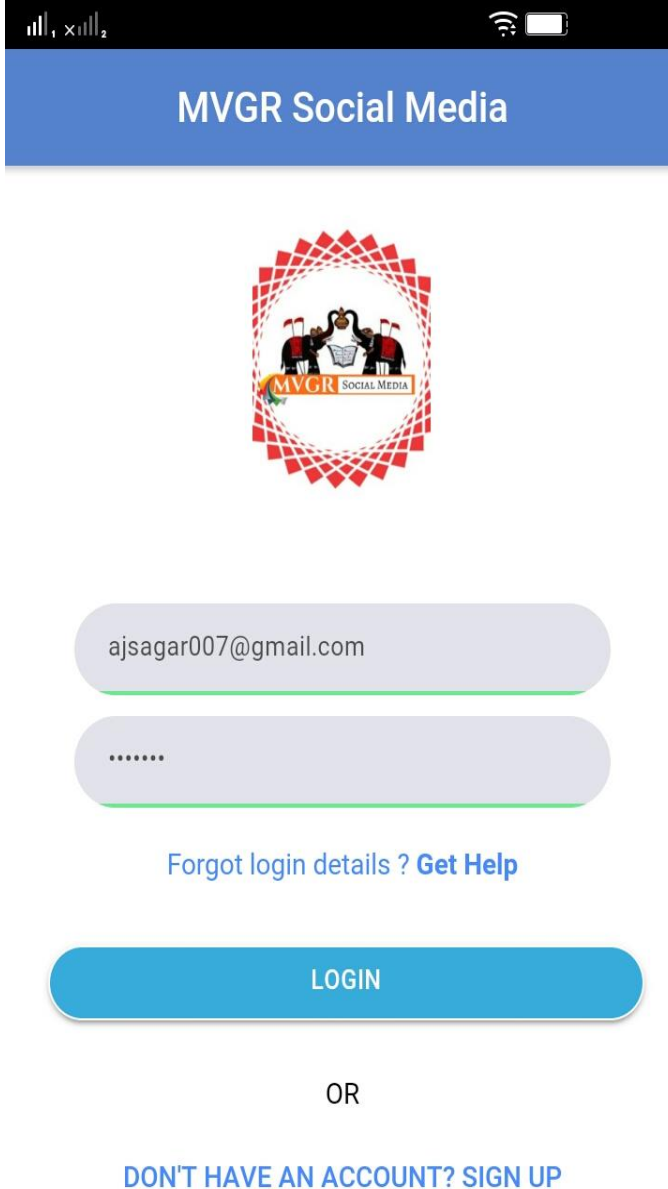
Splash screen: It displays the time between app launching and the components gathering in backend fig 7.2.



Fig 7.2(Splash Screen)

Login page:

In this the user needs to enter his/her Email and password. If the user enters the correct details then he/she will be able to enter into this application. If the Email/Password entered by the user was incorrect then a message will be



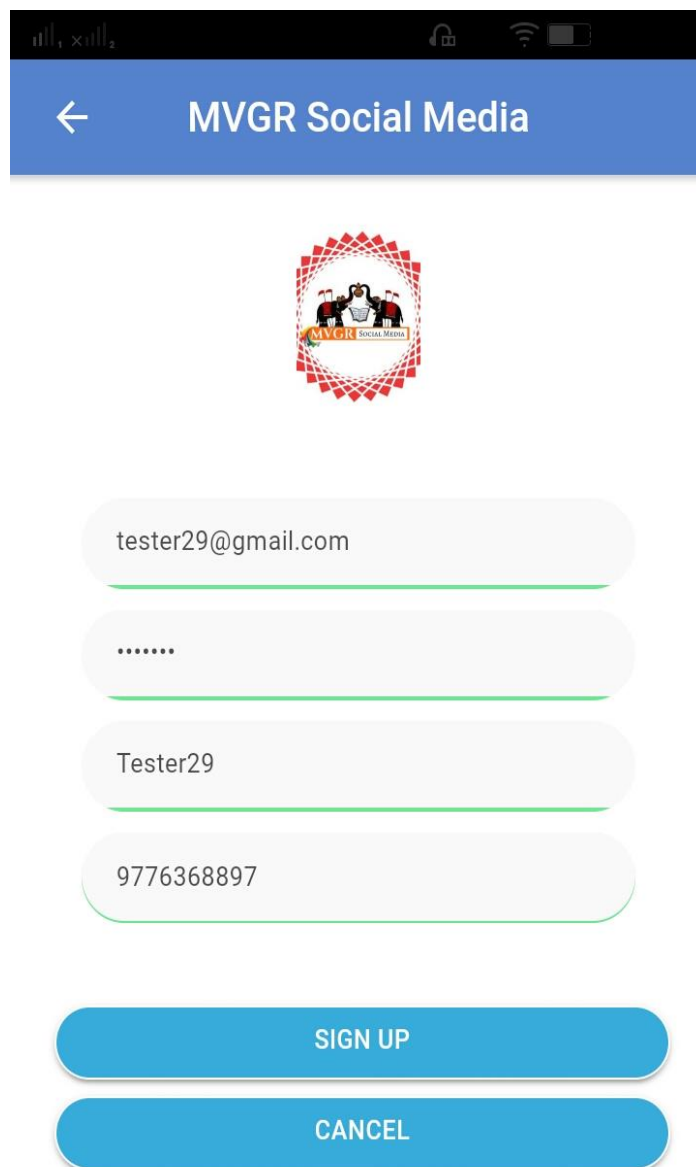
The image shows a mobile application login screen for 'MVGR Social Media'. At the top, there is a blue header with the text 'MVGR Social Media'. Below the header is a circular logo featuring two elephants and the text 'MVGR SOCIAL MEDIA'. The login form consists of two input fields: the first is for the email address, containing 'ajsagar007@gmail.com', and the second is for the password, represented by dots. Below the password field is a link that says 'Forgot login details ? Get Help'. A large blue button labeled 'LOGIN' is positioned below the input fields. Below the 'LOGIN' button is the text 'OR'. At the bottom, there is a link that says 'DON'T HAVE AN ACCOUNT? SIGN UP'.

Fig 7.3(Login Screen)


displayed saying that "Wrong Credentials" If the user has forgotten the details then he/she can tap on the Forget login details.

Signup:

If the user doesn't have an account then he/she need to sign up to use or enter into the application. In this page, the user needs to enter the details of his/her Email, password, nickname, mobile number. Then tap on sign up. After signing up, it asks to set a profile picture or user can even skip this step. After that user will be entered into the application.



← MVGR Social Media



tester29@gmail.com

.....

Tester29

9776368897

SIGN UP

CANCEL

Fig 7.4(User Registration)

Profile Pic:

The user can set a profile picture by simply tapping on the profile picture. On tapping the page redirects to the images which were present in our mobile in different applications. On selecting the image our profile picture will be set for this application. And a message will be displayed " your profile pic has been changed successfully" next press on okay. Once you have choose

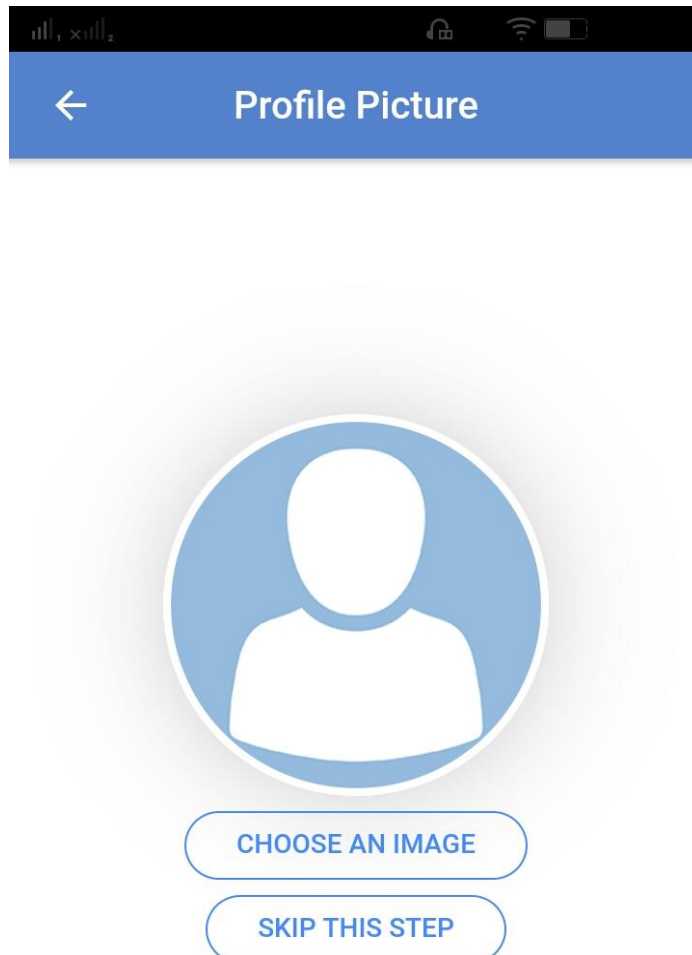


Fig 7.5(Upload image)

your profile picture you can click update and proceed button (fig 7.6) then you will navigate to the home page.

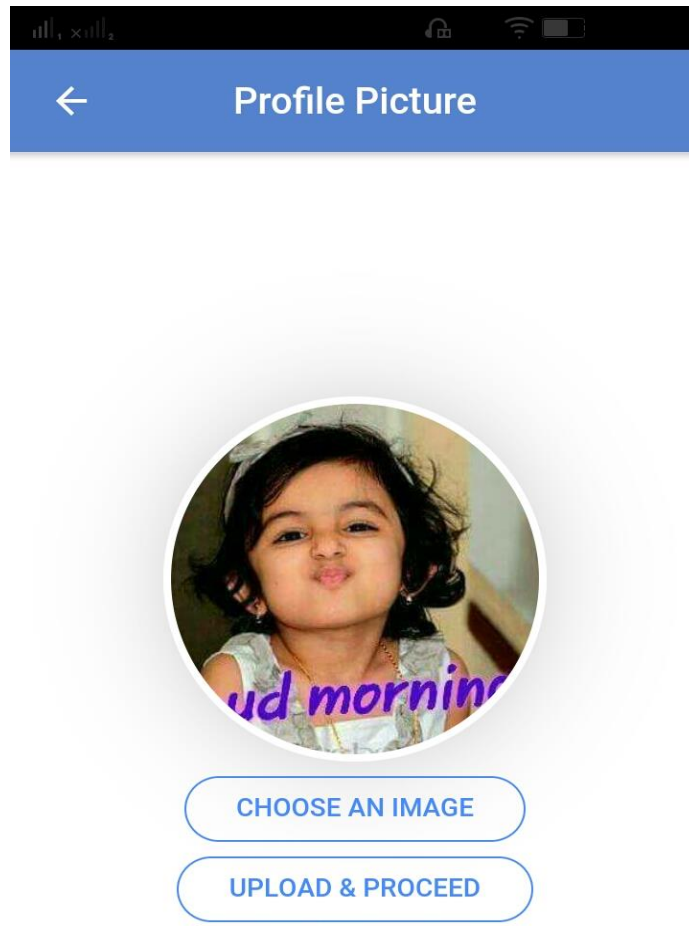


Fig 7.6(Profile Picture)

Home:

In this page there are 3 tabs. The are home, post your message, chats. In home tab all the posts will be displayed. The recent posts will be displayed at the top. In post your message tab we can post messages by giving title to the post and the message to be sent, we can even upload and send images. In addition to this user can even chat with his/her friends and can send requests.

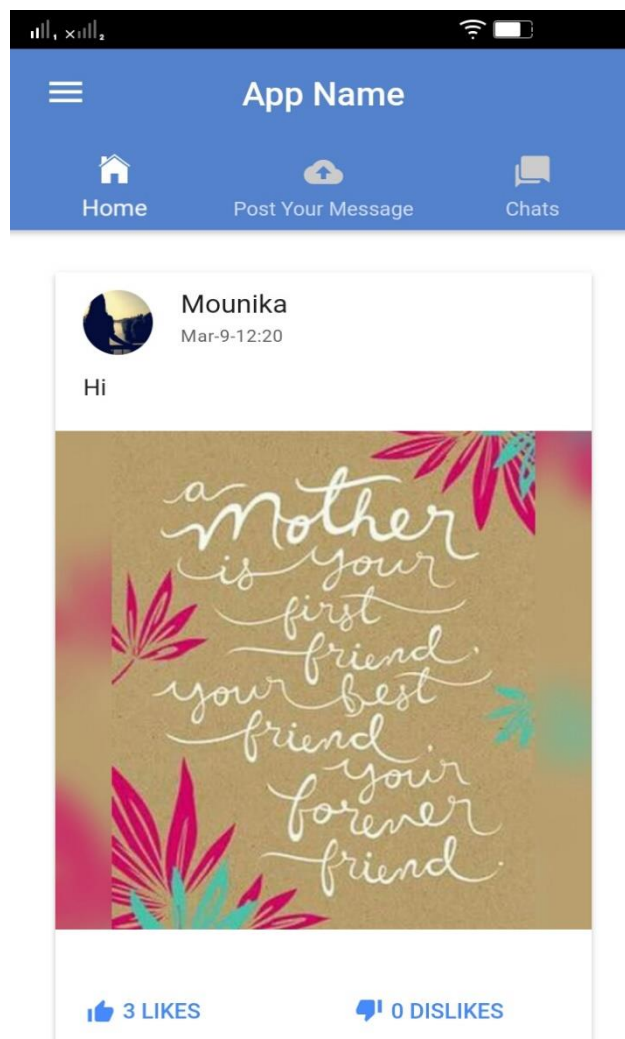


Fig 7.7(Notifications)

In this home page consists of navigation to other functionalities in the app to easy access. It will be displayed as shown in the figure 7.8.

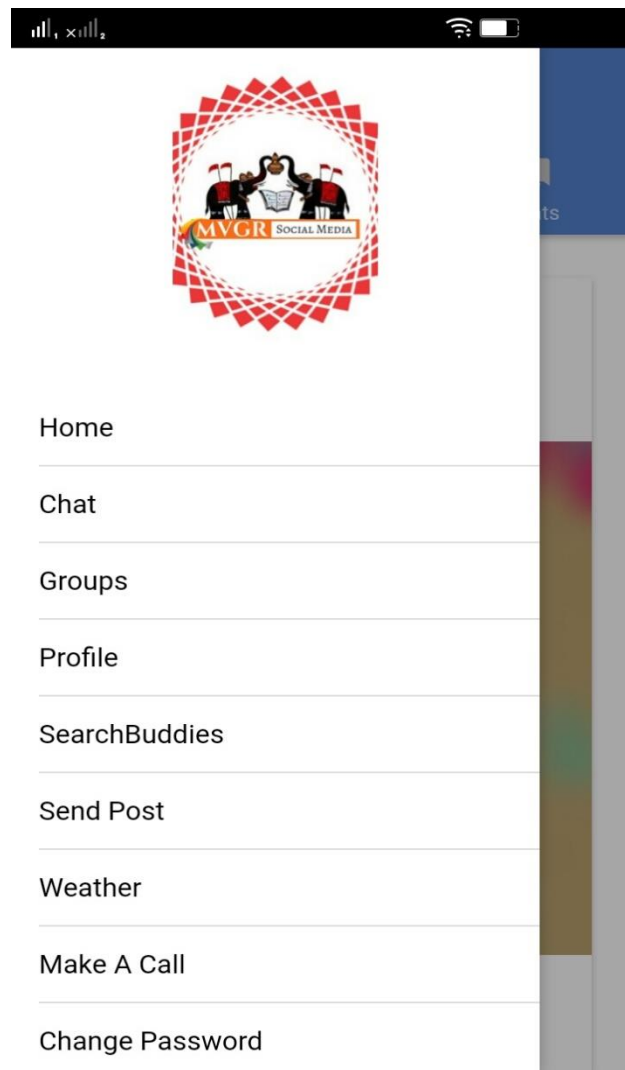


Fig 7.8(Navigation Screen)

Chats:

In this page there are three tabs namely chats, groups, profile. In chats the list of requests that the user is having and the list of all the friends will be displayed. For accepting the requests user needs to swipe right then if the user wants to accept then he can simply accept or can reject. For chatting if the user wants to chat then he/she can simply press that username who is already a friend from both ends i.e., both users who wants to chat needs to send and receive requests. The messages that were sent by the user will be displayed to the right side and blue in color and the friends messages were displayed to the left with his/her profile picture and the message will be displayed in a white text box.

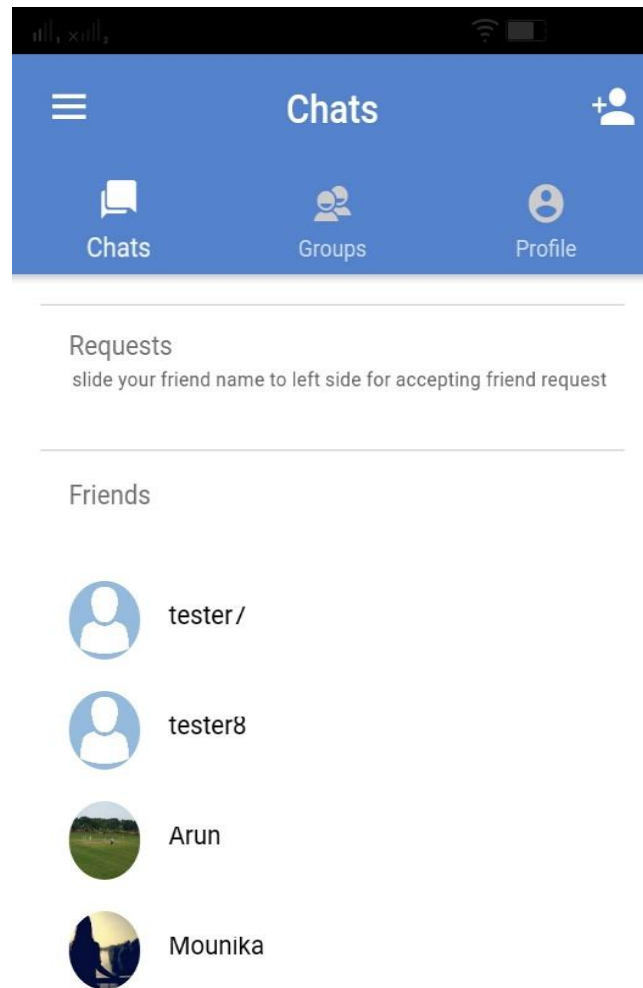


Fig 7.9(Chats Screen)

In groups tab, the list of all the groups that a user is having will be displayed. If he/she wants to chat in a particular group then he/she can simply do this by touching. The user can also create a group simply by touching a icon which is present at the top right corner and can set a profile picture for the group and can keep a name for the group and then click on create. Then the group will be created. Now after the creation of the group he/she can add member, remove member, group info, and can delete group. These rights are for the admin who created the flgroup and the members of the group can leave group, can see group info, and can

chat or send images in group by touching the camera icon. Now the images available in our phone will be opened and we can select and send.

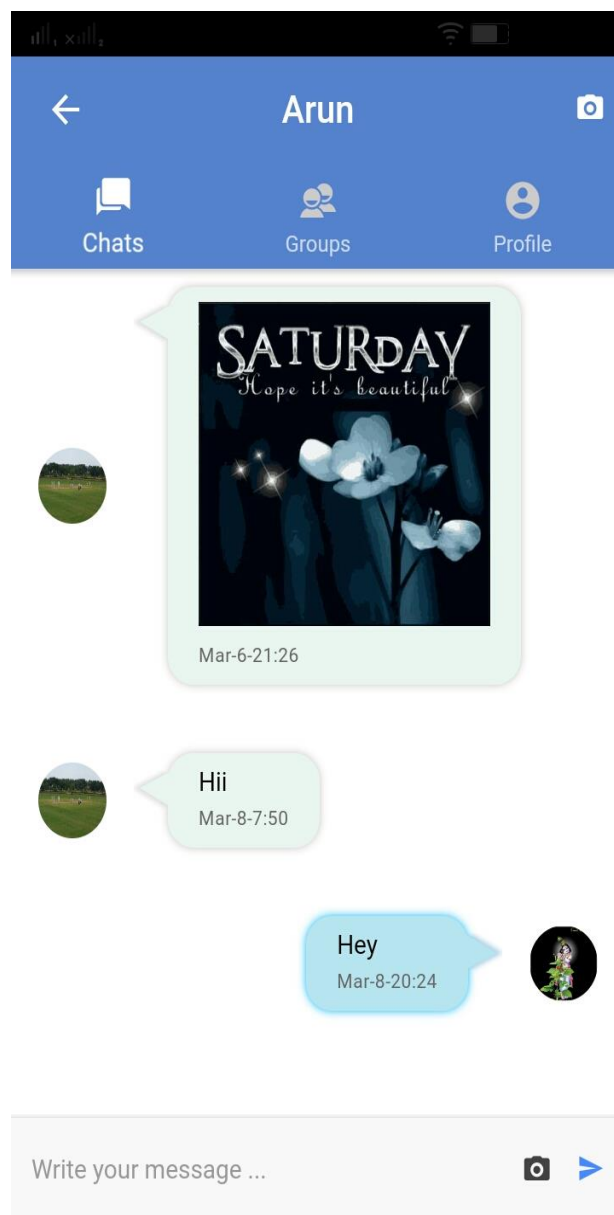


Fig 7.10(Chats)

The third tab is profile, in this we can change the profile picture, can edit name by clicking on the user name and can even change the mobile number by clicking on the old mobile number and edit it and finally the user can logout if he/she wishes to.

GroupChats:

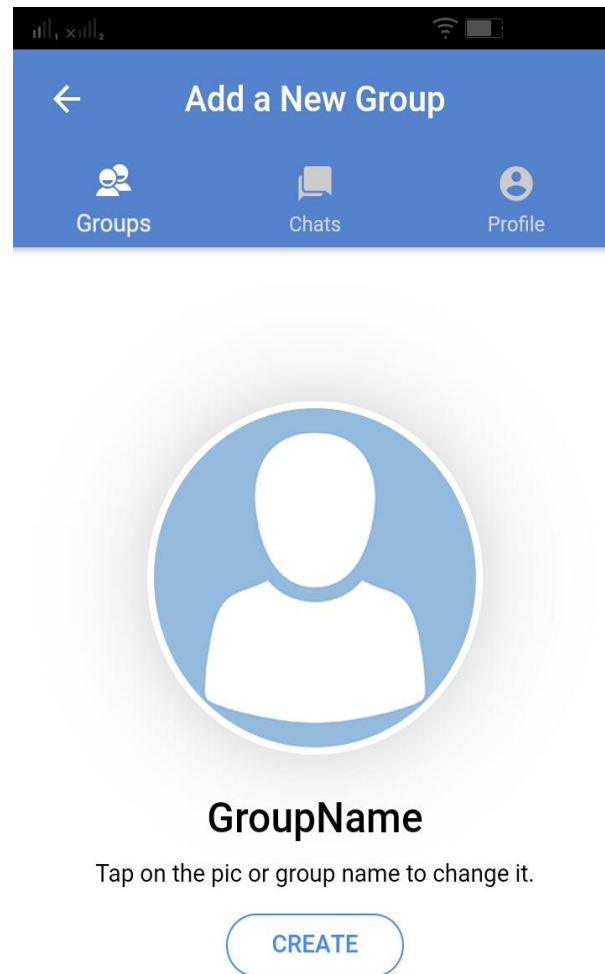


Fig 7.11(Group Creation)

In this if the user wants to send a message in a group he/she can simply type the text at the bottom of the page and press the arrow type logo at the bottom right corner or if he/she wants to send an image then it can be done by pressing the camera symbol at the bottom right and send it. The messages that were sent by the user will be displayed to the right side and blue in color and the messages of other members of the group will be displayed to the left with his/her profile picture and the message will be displayed in a white text box.

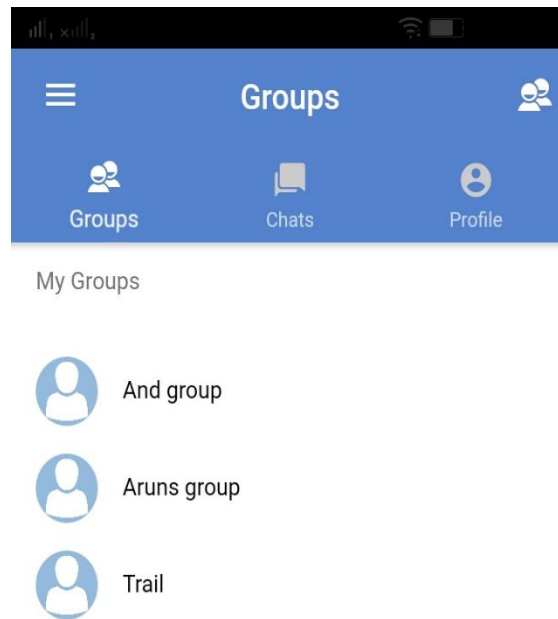


Fig 7.12(List of Groups)

In groups tab, the list of all the groups that a user is having will be displayed. If he/she wants to chat in a particular group then he/she can simply do this by touching. The user can also create a group simply by touching a icon which is present at the top right corner and can set a profile picture for the group and can keep a name for the group and then click on create. Then the group will be created. Now after the creation of the group he/she can add member, remove member, group info, and can delete group.

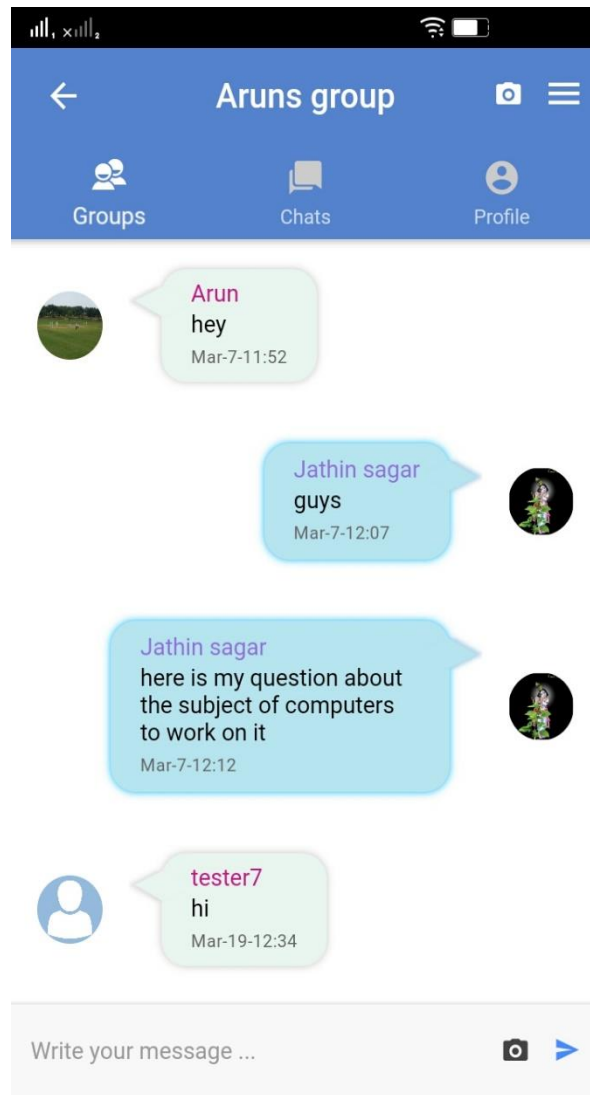


Fig 7.13(Group Chatting)

If user is admin of the group they have the following permissions:

- Add a member
- Remove a member
- Group info
- Delete Group
- Cancel

ADMIN :

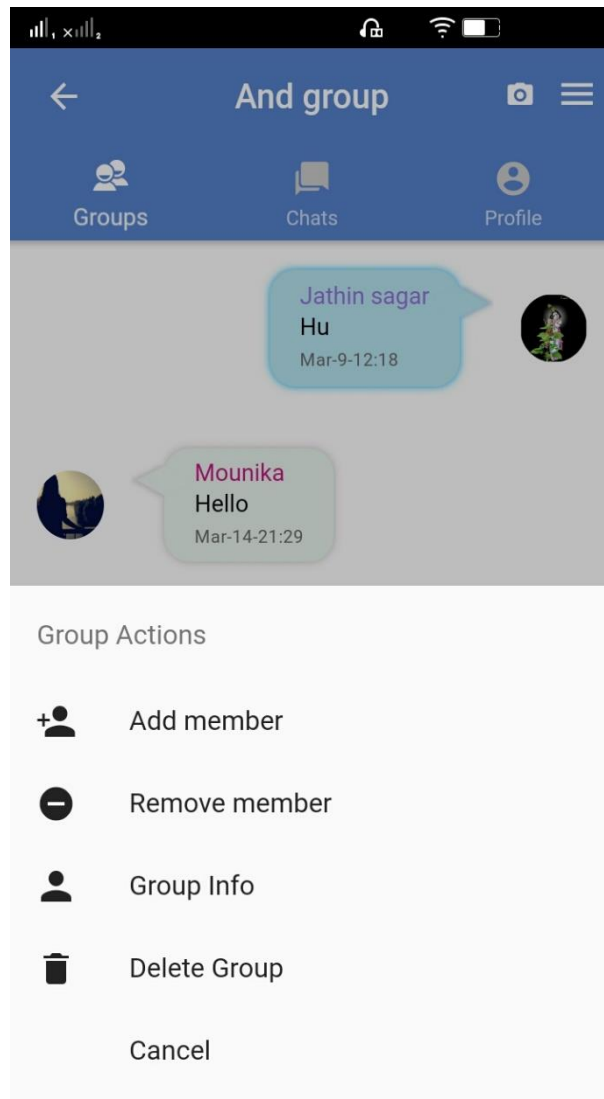


Fig 7.14(Admin Permissions)

If user is member in the group then has the following permissions:

- Leave a Group
- Group info

MEMBER :

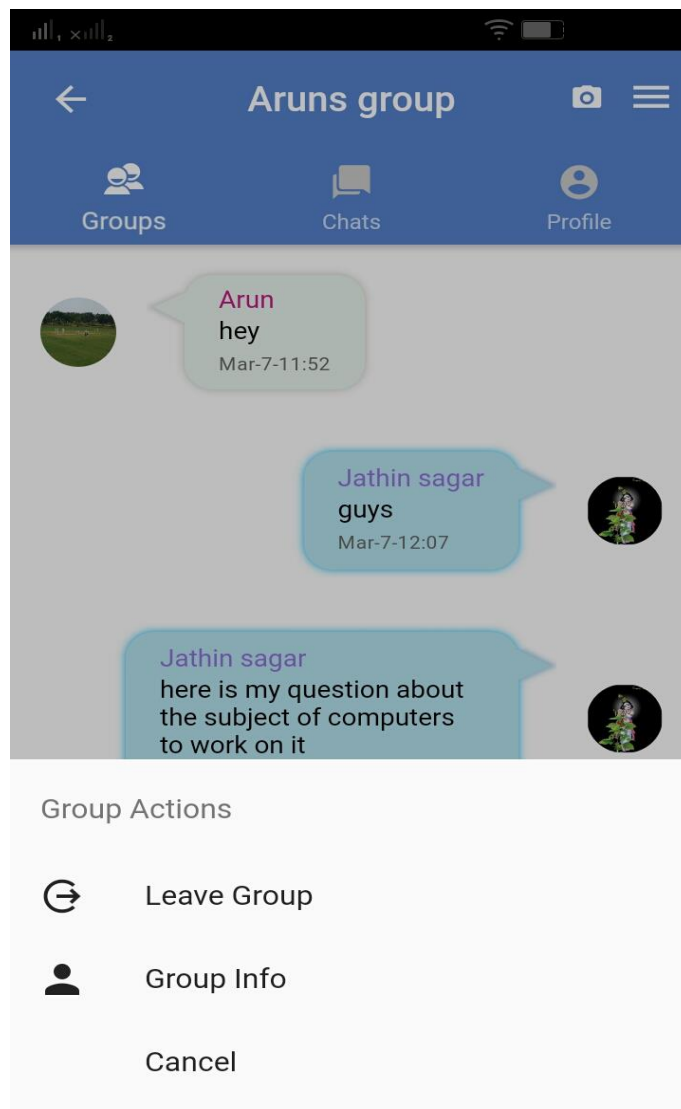


Fig 7.15(Member Permissions)

Add members:

In this the list of all the users who are members of the group can send messages and can chat with one another in group. In group buddies the list of all the users who are friends will be displayed then he/she can be added to the group by sliding to the left and selecting add. Then he/she is added to that group. Now, he/she is said to be the member of that group. The user can even search his/her friends in the list and add them to the group by doing the same.

Add a Member

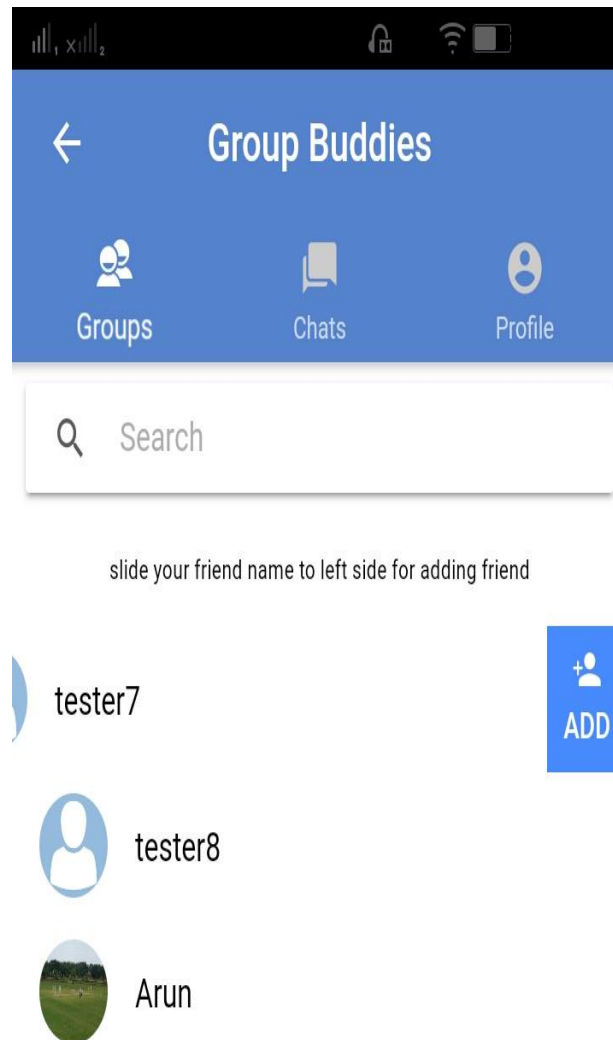


Fig 7.16(Add Friends)

Remove member:

In group the list of all the members present in the group will be displayed with their profile picture. Group is present in the top right corner under group actions press the remove member

then group members list will be displayed then you can slide member to remove from the group easily.

Remove a Member

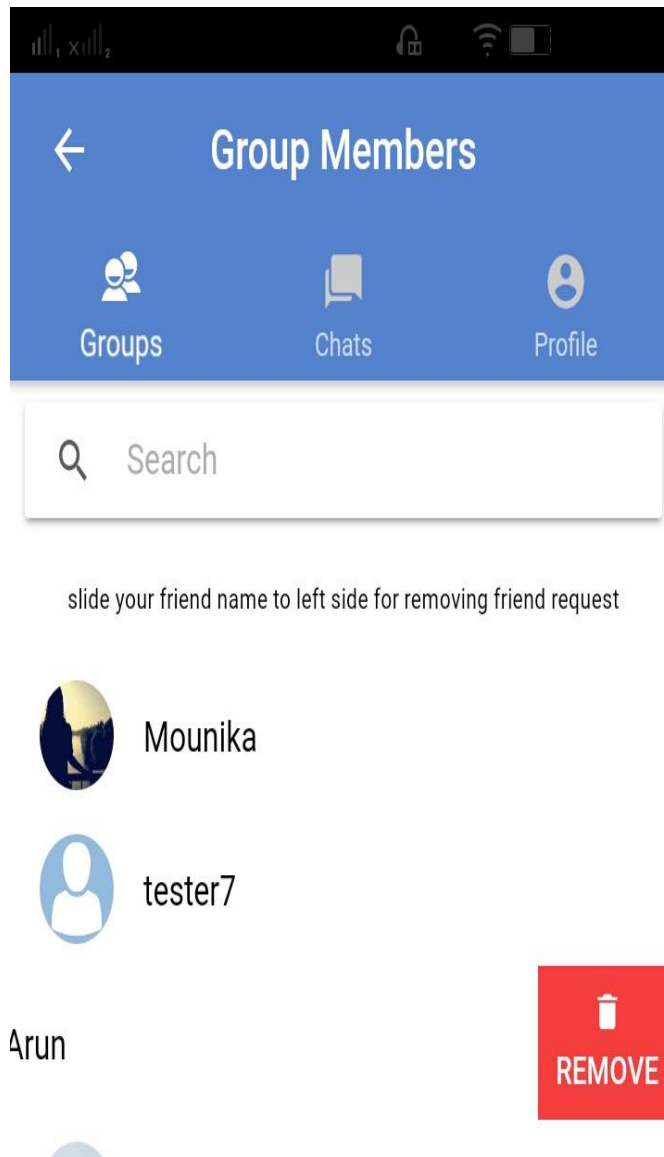


Fig 7.17(Remove Friends)

Group Info:

In groupInfo the list of all the members present in the group will be displayed with their profile picture. GroupInfo is present in the top right corner under group actions press the group info then group members list will be displayed.

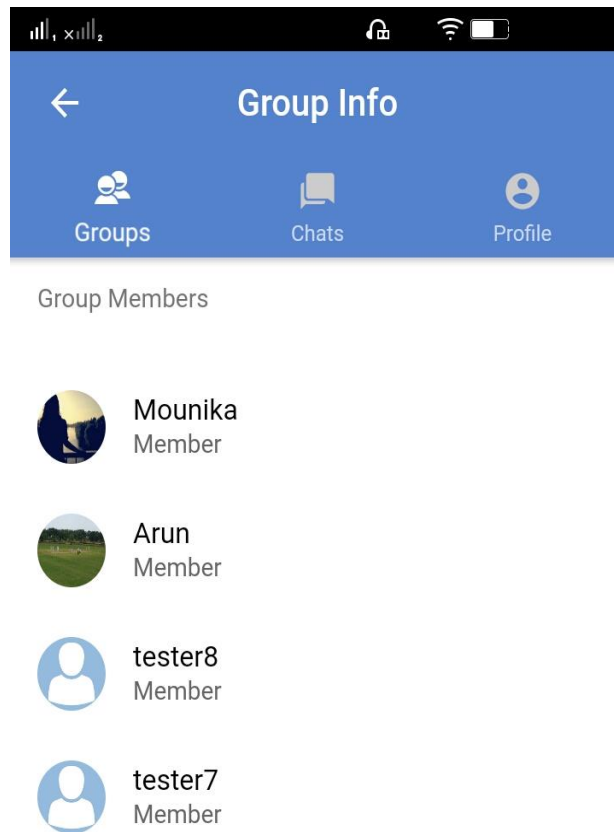


Fig 7.18(Group Info)

Delete a Group:

This operation can be performed only by the admin of the group.

Leave a Group:

This operation can be performed only by the member of the group.

Profile:

In this we can change the profile picture, can edit name by tapping on the user name and can even change the mobile number by tapping on the old mobile number and edit it and finally the user can logout if he/she wishes to.

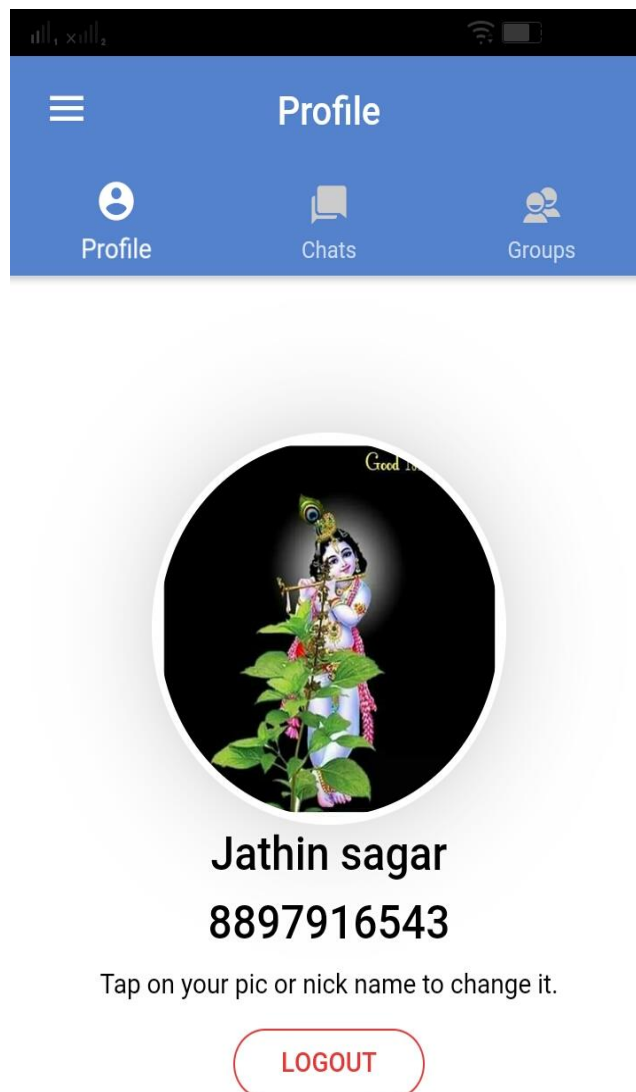


Fig 7.19(Profile Page)

When edited the nickname and mobile number it will be updated on the real time database firebase .displays the profile page as follows,

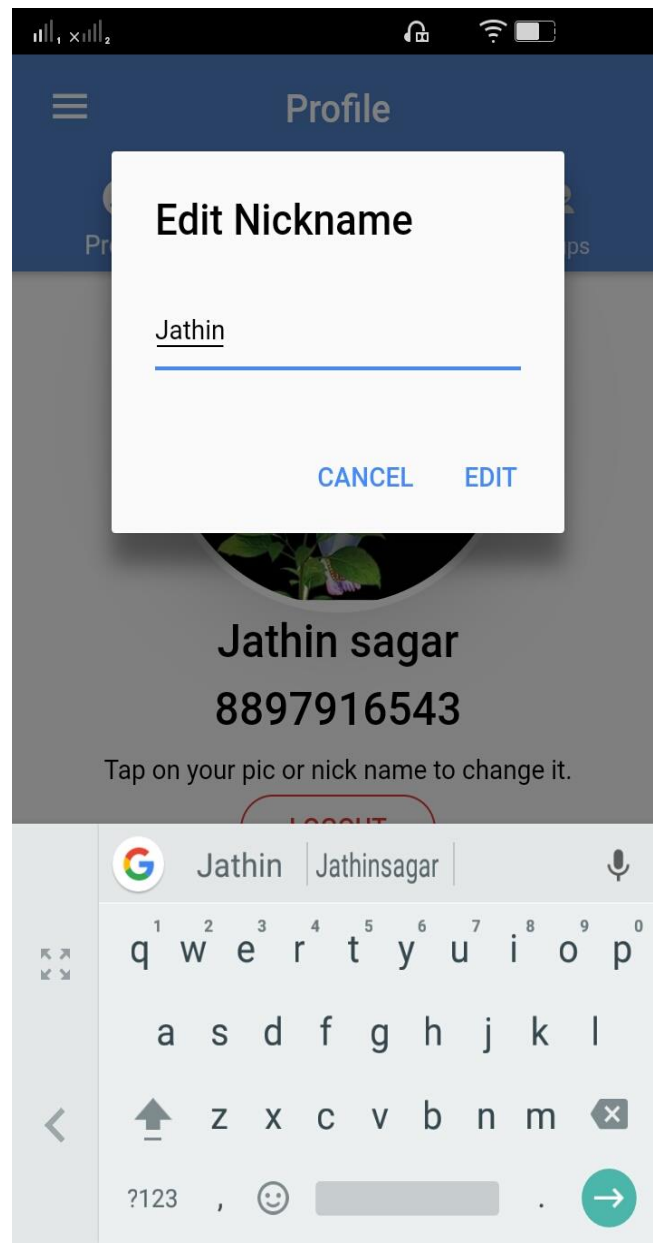


Fig 7.20(Updating)

After updating nick name or mobile it will alert as followed as shown in figure 7.21.

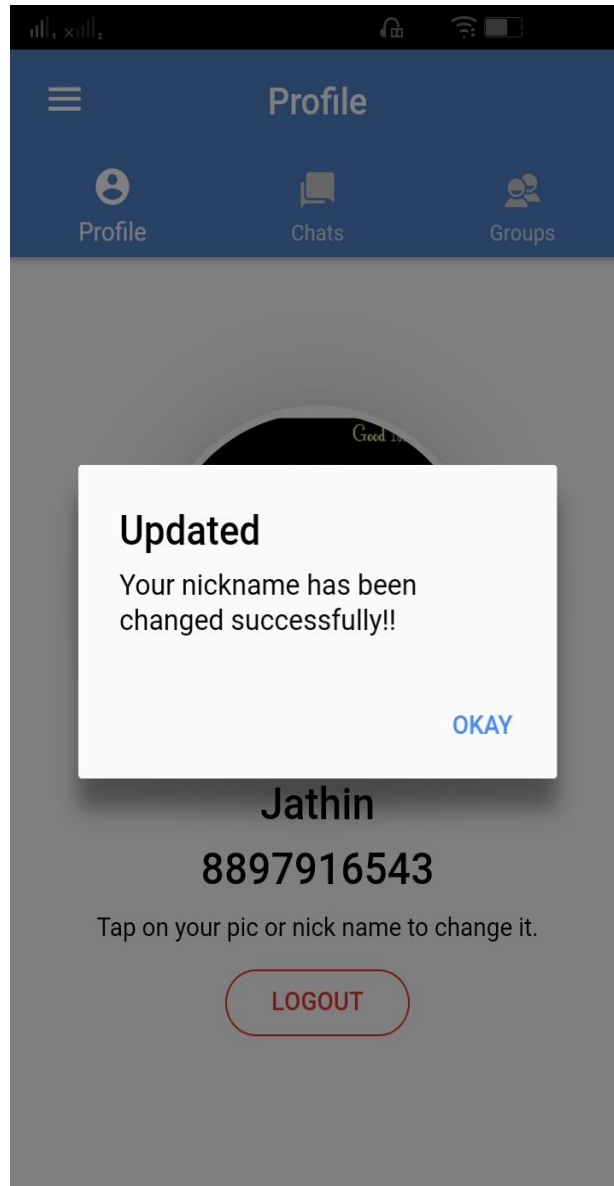


Fig 7.21(Updated Nickname)

Search Buddies:

In this page one can send request. The list of all the users who are using this application will be displayed. If the user wants to send requests then he/she needs to swipe right on the user name and can simply send request by a touch on add. Then a message will be displayed saying that "Your message was sent to username"

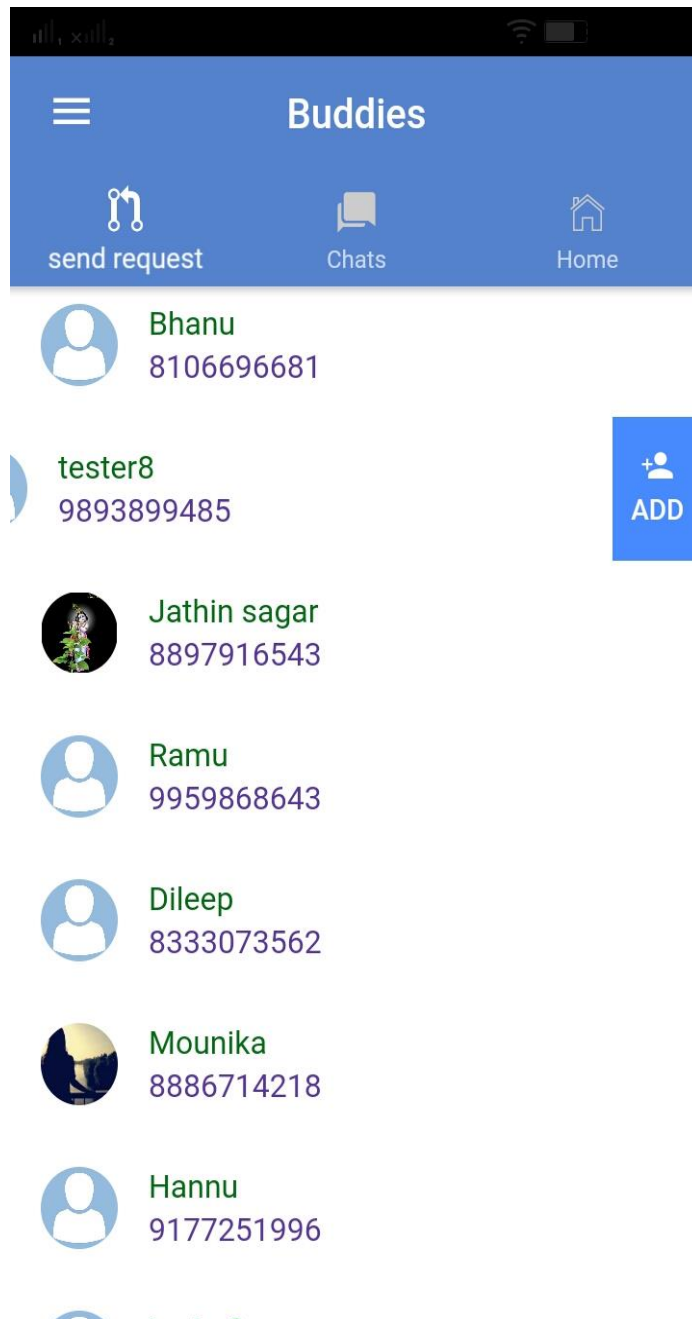


Fig 7.22(Search Friends)

In chats tab the list of requests that the user is having and the list of all the friends will be displayed. For accepting the requests user needs to swipe right then if the user wants to accept then he can simply accept or can reject. For chatting if the user wants to chat then he/she can simply press that username who is already a friend from both ends i.e., both users who wants to chat needs to send and receive requests.

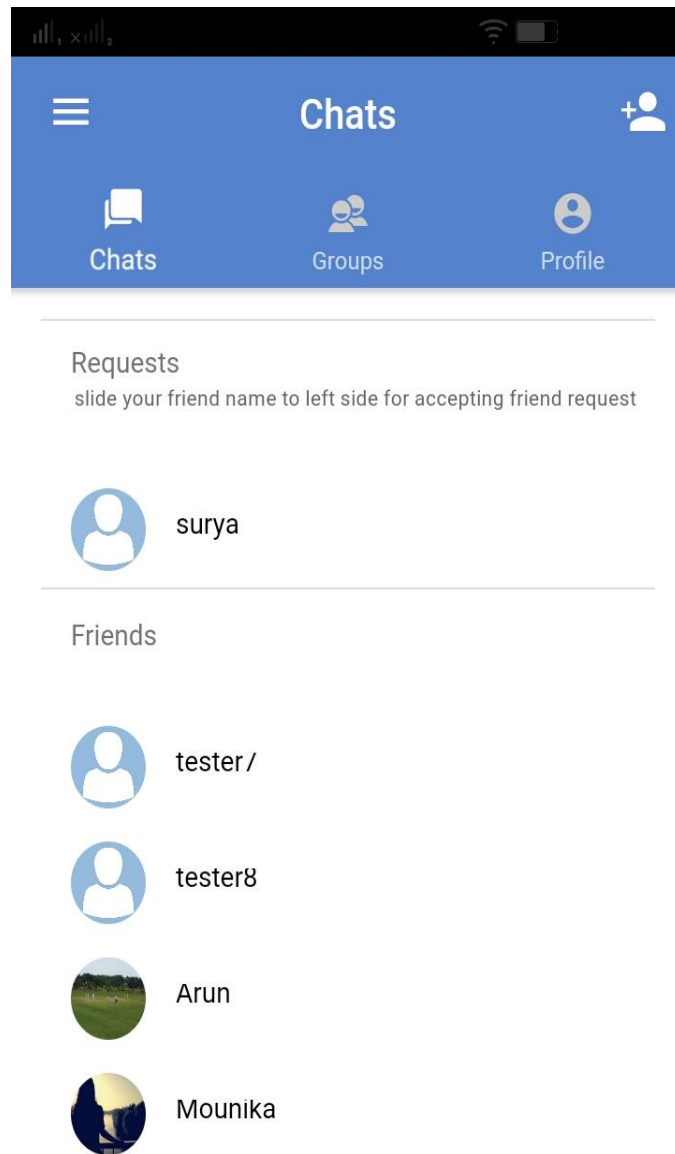


Fig 7.23(Chatting Page)

In home tab all the posts will appear. Posts will appear from most recent to the least. It will be displayed like shown in next page figure 7.24.

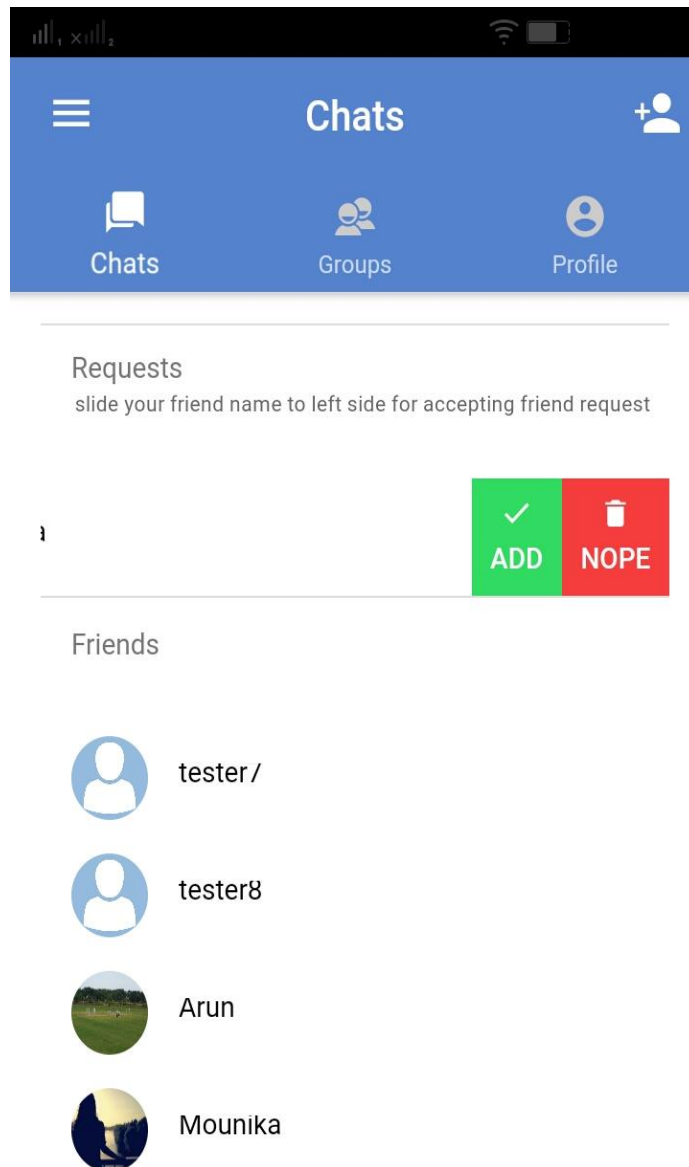


Fig 7.24(Accepting Requests)

After clicking on the add button it will shows request on chats page to display the list of requests and friends. Then sliding the request friend left side to accept or decline the request easily by single click. If accepted means it shows on the friends list and you can chat with each other.

If declined means request has been deleted from the database you can send it many times for friendship.

Send Post:

User can post the any notification, news, results, announcements, directly through the single post share with all the users using this app in our college community. Firstly we should share a message/post with adding some feeling/title. Then write message if you want you can share the photo also other wise it will take the message also to share with all.

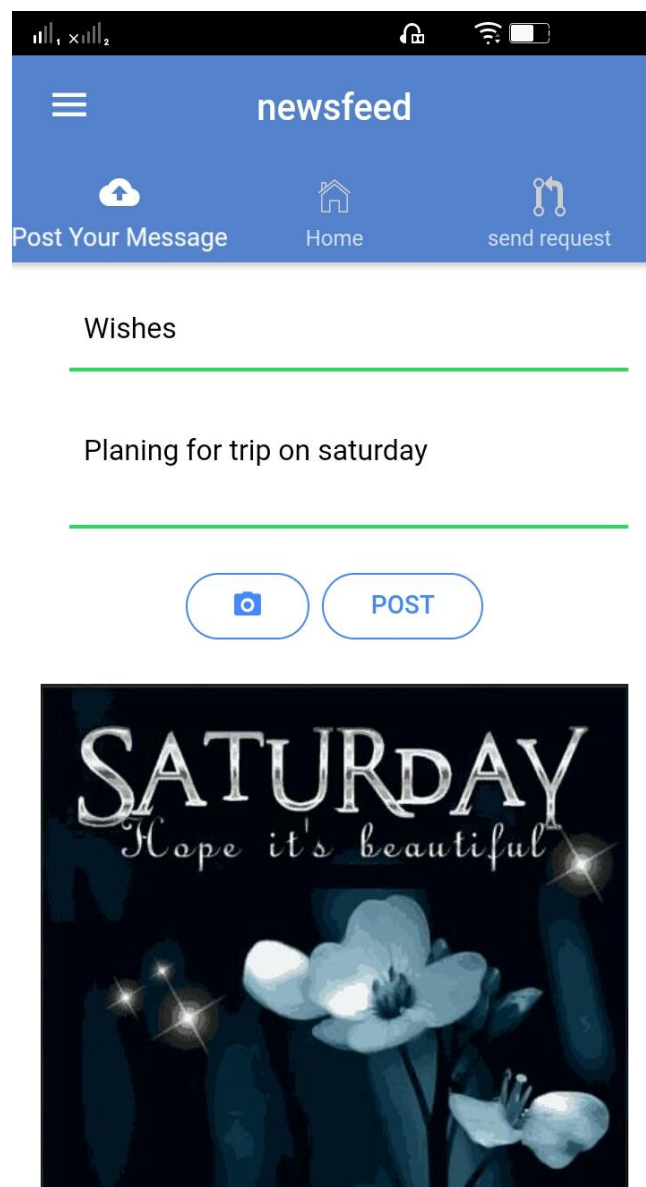


Fig 7.25(Posting)

We can also post the community meetups, campus placements details to know the status of the college placements. Beside screen shot represents the posting details.

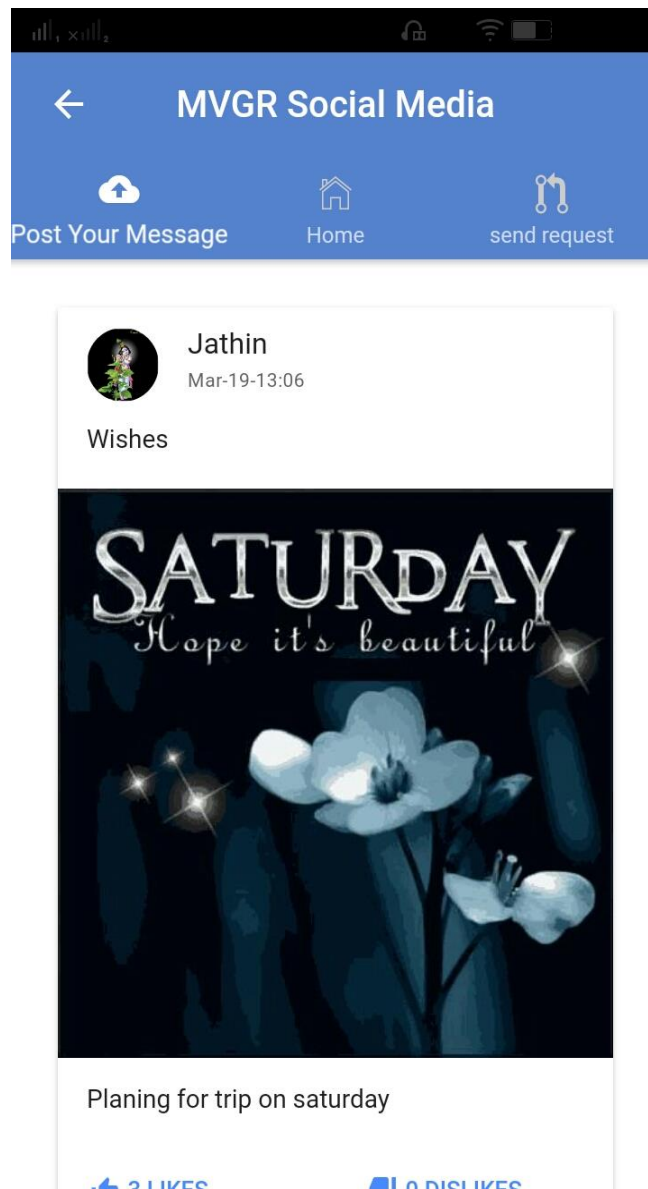


Fig 7.26(Home Page)

Weather:

In this page, the place which was selected by the user was displayed along with the symbolic representation of the weather was displayed along with the temperature in Fahrenheit. In addition to this, the details related to weather like Temperature, Relative Humidity, Dewpoint, Visibility, Heat Index.

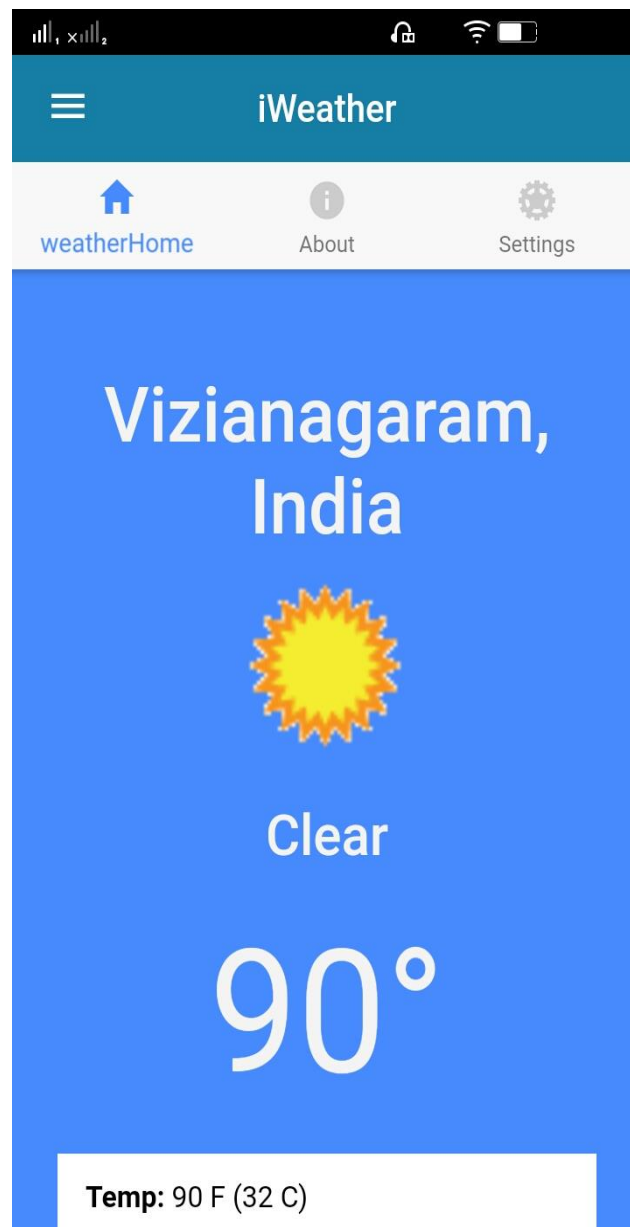


Fig 7.27(Weather Conditions)

In this page, the basic details like App name, version and description about the application was mentioned. The next page represents the setting the city and state.

In this, the user can enter the city and the state to which he wants to know the weather detail and press on save changes. Then the weather details of that particular location will be displayed. The details like Temperature, Relative Humidity, Dewpoint, Visibility, Heat Index are all know along with the symbolic representation of the whether and temperature in both Fahrenheit and in Degrees.

settings

weatherHome About Settings

City Vizianagaram

State AP

SAVE CHANGES

Fig 7.28(Settings Page)

Make a Call:

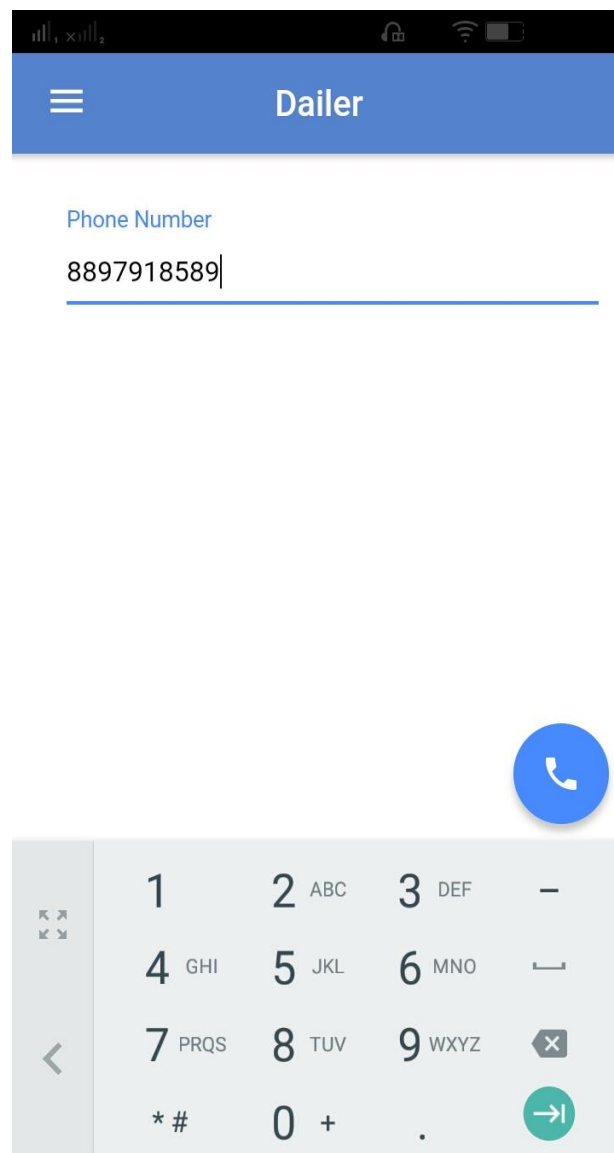


Fig 7.29(Dialler)

In Make a call, when the user clicks on make a call then a dialler page will appear in which the user can simply enter the contact number to which he/she wants to make a call and after entering the contact number he/she can make a call by simply touching the dialler symbol which is present at the bottom right corner. Now the call is made as a normal call from our mobile i.e., It connects to the dialler of our mobile.

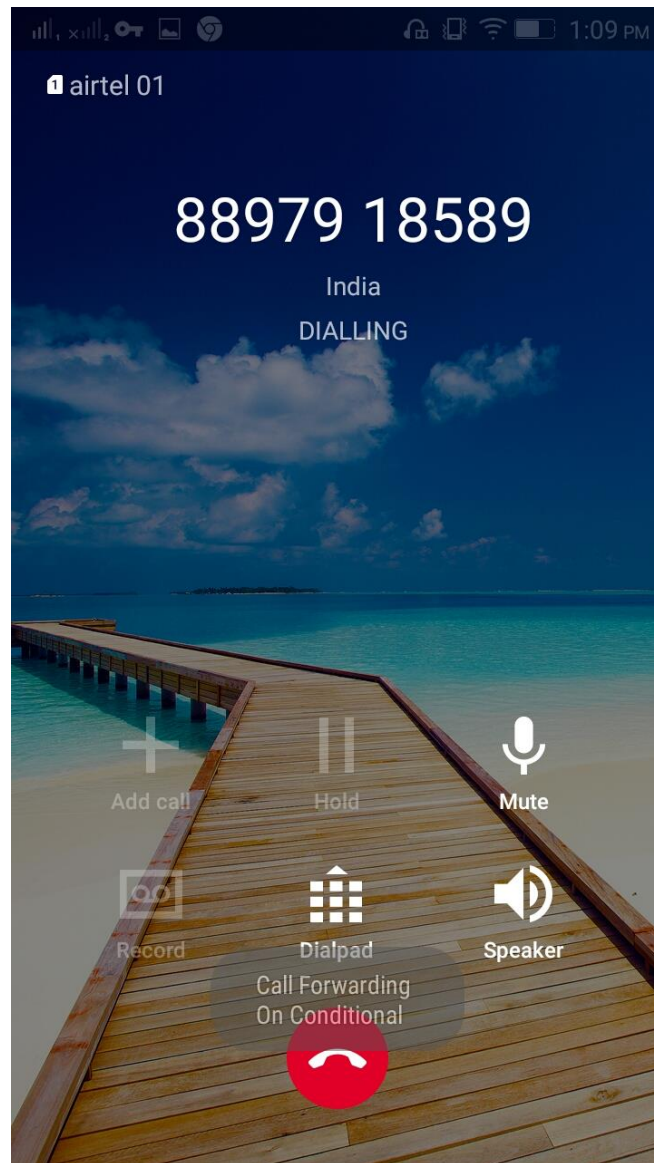


Fig 7.30(Calling)

Change Password:

If the Email/Password entered by the user was incorrect then a message will be displayed saying that "Wrong Credentials" "The password is invalid or the user does not have a password" If the user has forgotten the details then he/she can tap on the Forget login details. Then press on "forget login details" then a page will be displayed asking your mail id to reset your password. Tap on reset you will receive a mail in which there will be a link to set your password.

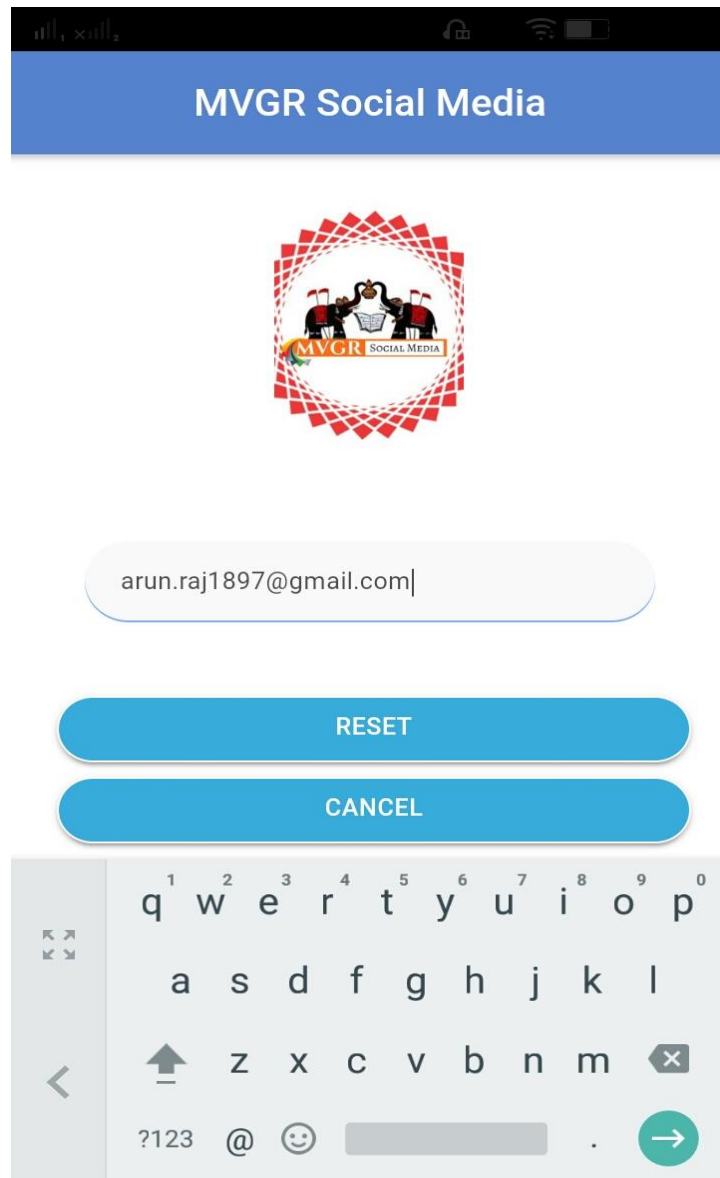


Fig 7.31(Reset Password)

Tap on reset you will receive a mail in which there will be a link to set your password. Reset your password page will appear. In which you need to enter a new password and press on save. Then a message will be displayed as " Your request to reset your password was successful". Now you can simply login with the new credentials.

Logout:

We can click logout button to navigate to the session logout and redirected to login page.

CHAPTER 8

CONCLUSION

“MVGR SOCIAL MEDIA” is an application which is developed using Ionic platform which runs on **“BROWSER”**, **“ANDROID”** and **“IOS”**. In this application student of MVGR college gets registered through their mail id or register number. This will be the authentication for every student. Initially a student sends request to his/her friends. The other person who received the request will accept only if he/she knows them and in return they should also send the request. So by this we can say that both sides friend request should be sent and accepted only then they can become friends and can start chatting. In this application students can chat with individual persons and we can also create groups.

The main reason of developing this application is **“POSTING”**. As we are aware that MVGR is first in conducting Student Activities, in this application we can post Events, Updates, Upload videos, Images, add comment share our views on the name of likes and dislikes. MVGR also conducts **“KITAB EVENTS”** which can be updated in this media. Other aspects like Job updates or any events that happens in any other colleges can also be updated. So that we can be aware what happens around us. Other department’s conducts competitions like Essay writing, debates and many more. This may not reach us on time and we may miss many opportunities. In order to overcome these issues **“MVGR SOCIAL MEDIA”** is been developed. In this application we can also make **“CALLS”** to our friends which directly gets connect to our phone book. Also we can know the **“WEATHER CONDITIONS”** of current place by giving the city and state. We will get the temperature in Fahrenheit and Celsius degrees along with the humidity and other details. Thus, this application brings entire MVGR into one community.

CHAPTER 9

FUTURE SCOPE

We tried to install Cordova plugins for authentication of user by using the ID cards of college instead of giving username and password, this might be the scope for future. Moreover, music player can be operated through this application in further. Today's application is flexible with limited number of users, in future it can be extended based on some purchases on cloud. In this app it can give weather conditions by entering current City and State. In this aspect taking of GPS of current location automatically and giving the weather conditions might be the further scope. Coming to Fun zone including of some games in this application might be the future scope for this application.

CHAPTER 10

REFERENCES

- [1] Ionic frame work documents.

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- [2] Chatting basics and typescript reference by Raja Yogan

<http://tphangout.com/chat-app-with-ionic-3-and-firebase-ep-1-sign-in-tabs/>

- [3] Firebase console

<https://console.firebase.google.com/u/1/project/todo-4469d/overview>

- [4] Weather api reference

<https://github.com/bradtraversy/iweather>

https://www.youtube.com/watch?v=qs2n_poLarc

- [5] Phone call from app

<https://www.youtube.com/watch?v=7kKcpgcSW60>

- [6] Git hub link of total project :

<https://github.com/tarunkumarchinni/mvgrsocialmedia>