

Team – DevOops

Project - missionB

Motivation -

Every two second, someone in the world is in need of blood. In India, there is a need of 5 crore blood units every year out of which only 2.5 crore unit requirements are met. A single car accident victim may require as many as 100 blood units. This application might be very useful in such situations meeting the requirements of blood by the people who might be willing to donate blood.

Problem Statement -

Blood being the most important element for humans to survive, developing an application to interconnect blood requesters and donors might help save lives during emergency. Making such an application which is user friendly as well as has more features for serving the people better, we are proposing a model in which we are going to connect the blood donor and requester together in a unique way.

Objectives-

Blood donation app to interconnect blood donor and blood requester in a unique way. Blood requester can post their request by filling a form and donors will be notified within the range if any requests are present. All the blood requests are plotted in the maps with a marker displaying the details of the requester. Notifications for donors and blood banks are made for blood requests nearby. The application is linked with Social Network (Twitter) in order to collect blood request made directly from twitter.

Existing System –

People who are in need of blood at emergency situations try to contact their relatives and friends or share the details on WhatsApp which doesn't really help them much if there are no donors which match the criteria and also they can contact only people they know and not strangers who might be willing to help them.

Proposed System –

Requests updated in the application will be plotted in the Maps

API and any person using the application can easily see the nearest blood request and choose to help. Requester can also notify people within the city if they are willing to donate blood. Requests can be made through twitter using a specific hashtag which will be displayed in the application using Twitter API.

Methodology –

The application is developed on Android Studio with the help of Google Maps API. Firebase is used as the back-end to collect all the users data which is stored securely.

IMPLEMENTATION

We started with creating a new project in **Android Studio**.

Integrated the **Firebase** in our Android Studio and started

working on designing screens and implementation. After

that we integrated the Google Maps API and then started

working on connecting and storing all the necessary details

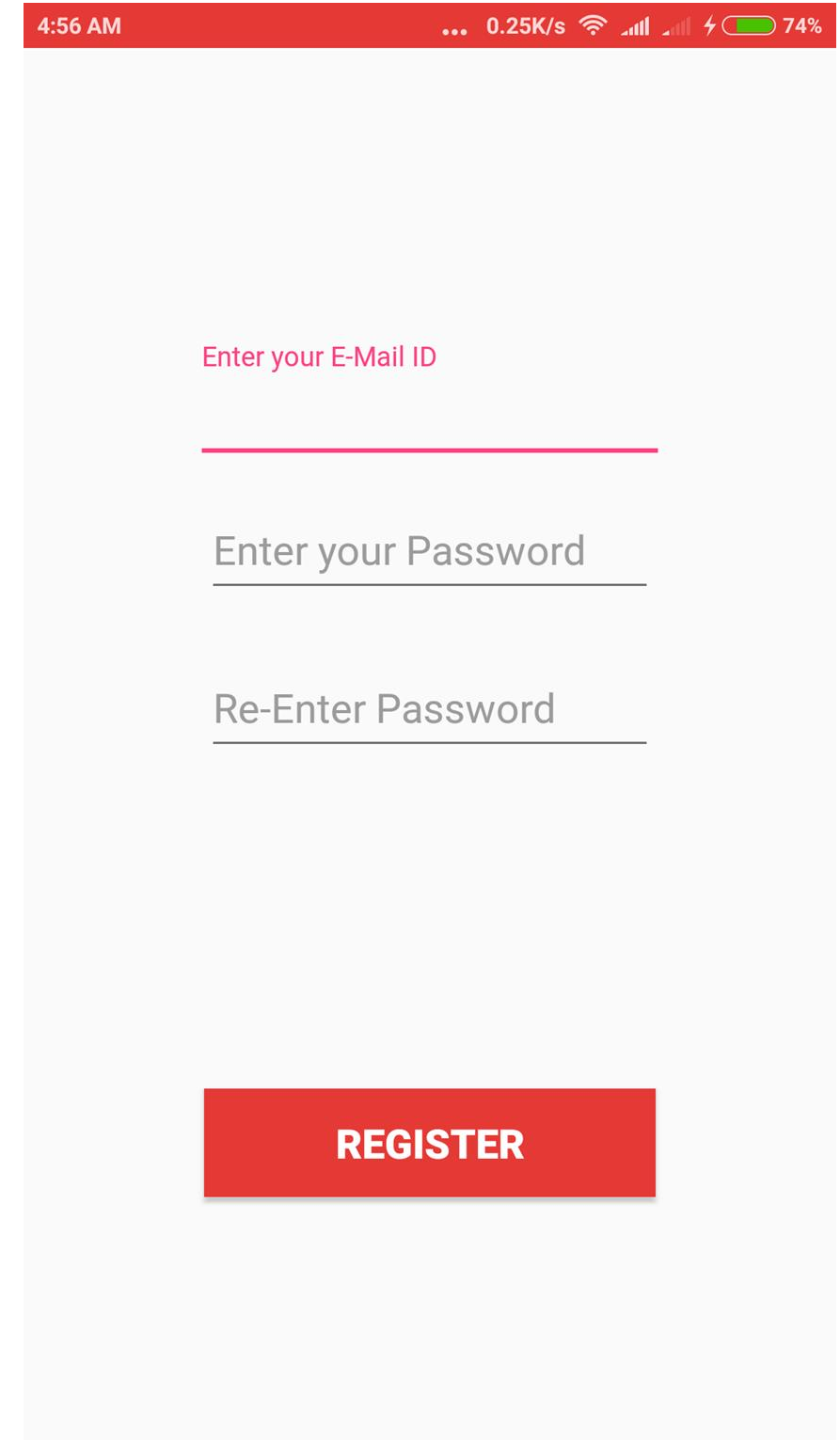
in firebase. We linked the application with Twitter API to

connect it with a larger group of people.

Modules :-

PRODUCT DESCRIPTION

1) Registration panel - A unique registration panel has been created for each and every user who signs in the app. Their unique uid gets generated and stored in **firebase (Backend)**.



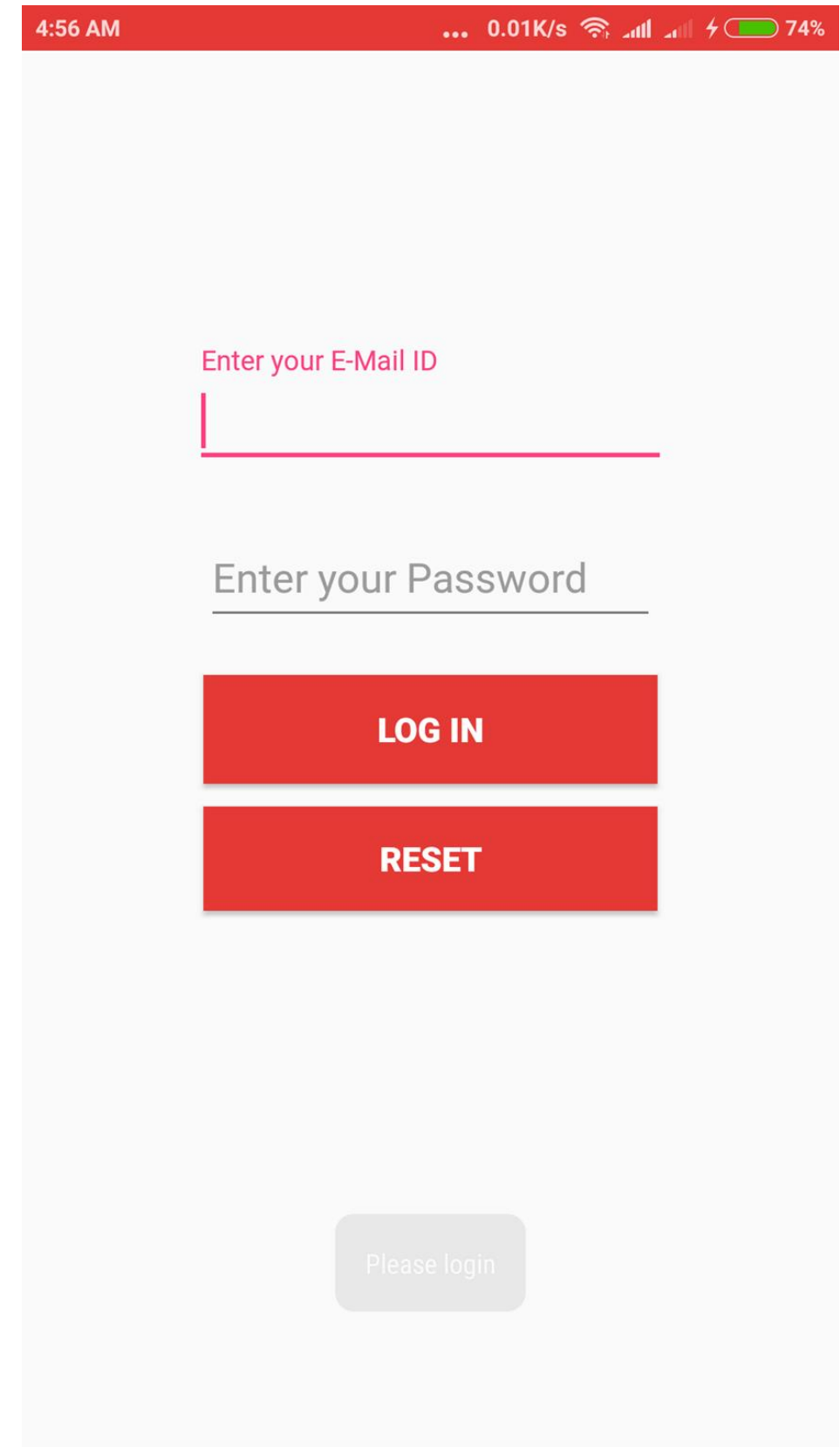
A screenshot of a mobile application's registration screen. The screen has a light gray background. At the top, there is a red status bar with white text showing '4:56 AM', signal strength, Wi-Fi, and battery level at 74%. Below the status bar, the text 'Enter your E-Mail ID' is displayed in a pink font. Underneath this text is a pink horizontal line representing an input field. Below the pink line, the text 'Enter your Password' is displayed in a gray font, followed by a gray horizontal line. Below the gray line, the text 'Re-Enter Password' is displayed in a gray font, followed by another gray horizontal line. At the bottom of the screen, there is a prominent red rectangular button with the word 'REGISTER' in white, bold, uppercase letters.

2) Login Panel - Once

registered , user can login

inside the application

through a login panel.



A mobile application login screen with a red status bar at the top showing the time 4:56 AM, network speed 0.01K/s, and a 74% battery level. The screen has a light gray background. It features two input fields: the first is labeled 'Enter your E-Mail ID' in pink text with a pink underline, and the second is labeled 'Enter your Password' in gray text with a gray underline. Below these fields are two red buttons with white text: 'LOG IN' and 'RESET'. At the bottom center, there is a gray button with rounded corners and the text 'Please login' in a lighter gray color.


3) Profile panel -

Every user holds a unique profile having all the necessary required information.

5:00 AM

2.53K/s

74%



Enter your name

Chetan Dwarkani

MOBILE NO.

9566015521

BLOOD GROUP

A+

☒ Male

☐ Female

Anna University,
Kotturpuram, Chennai,
Tamil Nadu, India

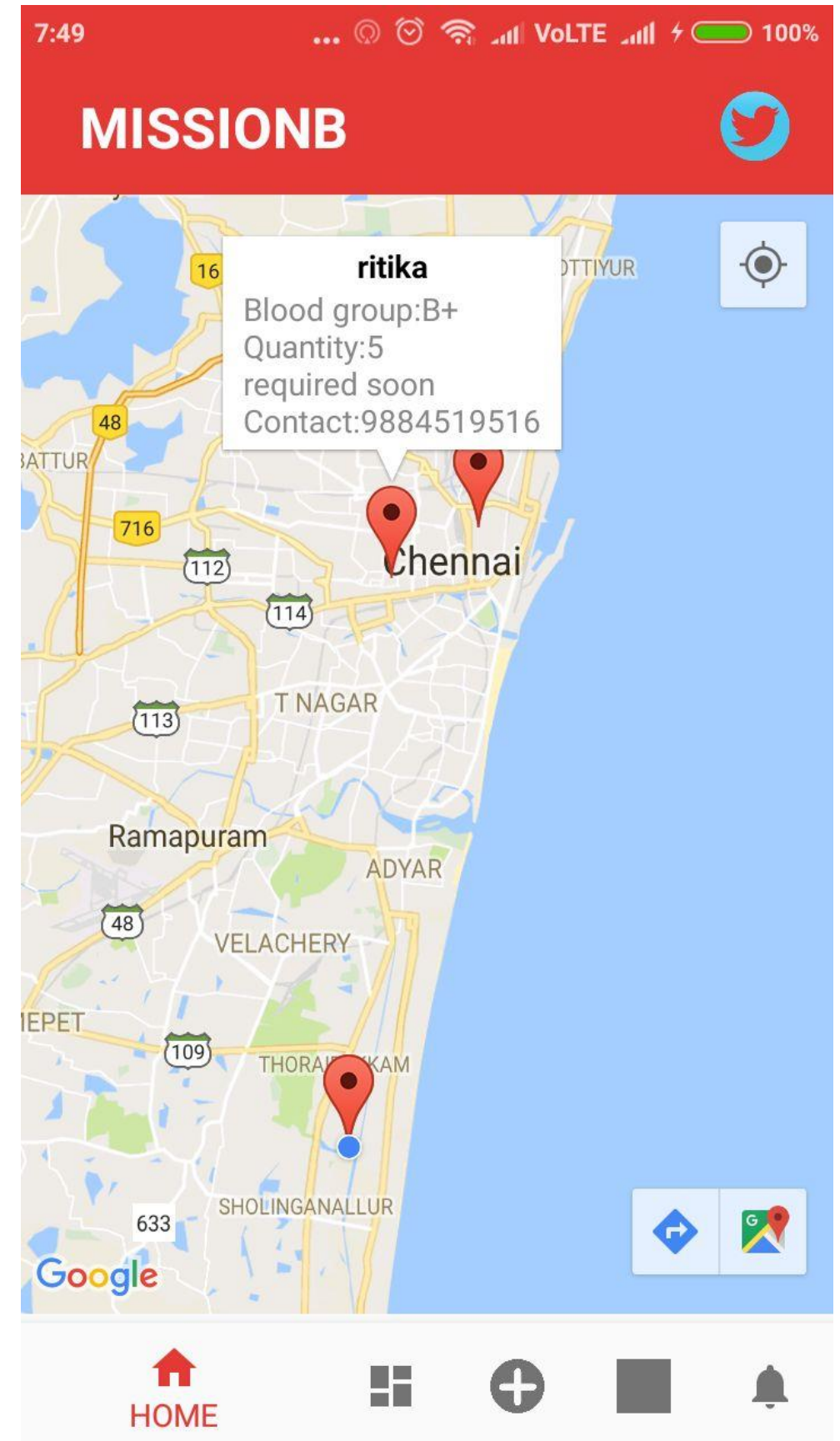
21

user

UPDATE PROFILE

LOG OUT

4) Maps panel - Google maps
has been integrated in our app
which shows complete details
about user and blood banks
who needs blood nearby to
your location with directions.



5) Blood request -

Blood needy ones can
post the blood request.

All the data posted by
blood requester gets
stored in **Firestore** .

5:01 AM0.07K/s74%

POST BLOOD REQUEST

Enter age

☒ Male
☐ Femal

Blood Group

Required Units

Not Selected

Required Unit

Enter your Contact No.




Enter Description of your request

PLEASE CLICK ON GET YOUR CURRENT LOCATION

REQUEST FOR BLOOD

6) **Blood view panel** - Blood donors can see the blood request by needy ones. **We have integrated Google Maps API** so that the blood requesters ones can easily locate the blood donors near their very own location.

6:45 AM

... 0.45K/s    76%

My Location

Anna University, Kotturpuram,
Chennai, Tamil Nadu, India
Chennai
Tamil Nadu

request

25

O+

2

sample

9, Nageswaran Rd, Parthasarathi Puram, T Nagar, Chennai, Tamil Nadu 600017, India

76649564949

GET DIRECTION

SHARE

var

18

A+

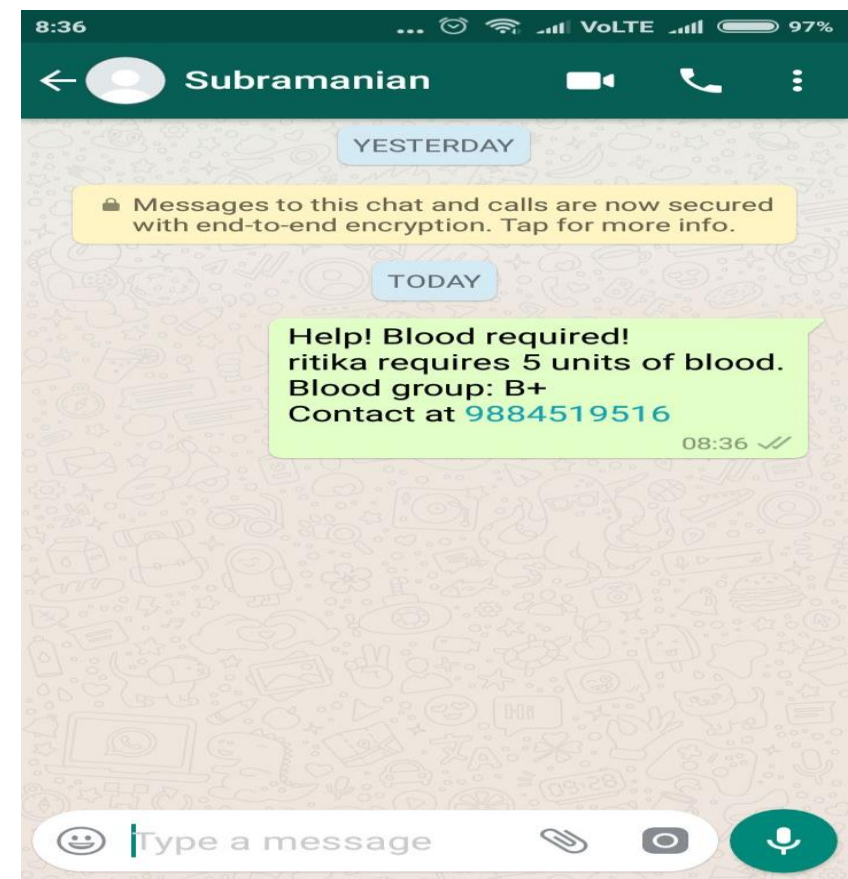
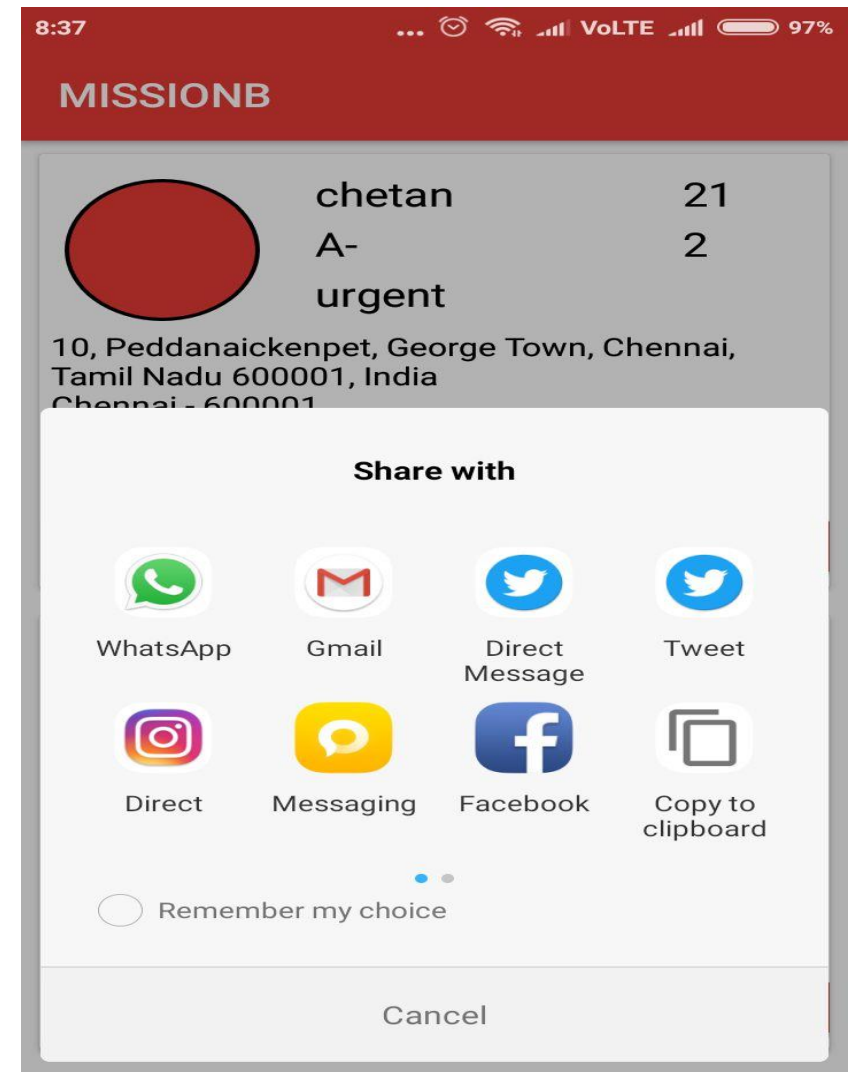
4

ugent

Anna University, Kotturpuram, Chennai, Tamil Nadu, India




7) SHARE DATA –

We have made it easy for people to share such information with others using WhatsApp and other applications.



8) WEBSITE DASHBOARD-

All the user and blood request currently preset in database can be viewed.

Mission-B									
Dashboard									
Post Details									
USER PROFILE DASHBOARD									
Copy Excel CSV PDF Print									
Search:									
PHOTO	UID	NAME	EMAIL	PHONE	BLOOD-GROUP	GENDER	AGE		
	KF8uhSBfX5Y2M6OU2eiBaWzstmH2	che	chetan@gmail.com		Not Selected	Female	21		
	PP9qJq1IirOGWVuZsvkqd5QGj4f1	Ritika	ritika9494@gmail.com	9884519516	B+	Female	19		
									

9) NOTIFICATION PANEL -

All the requests accepted

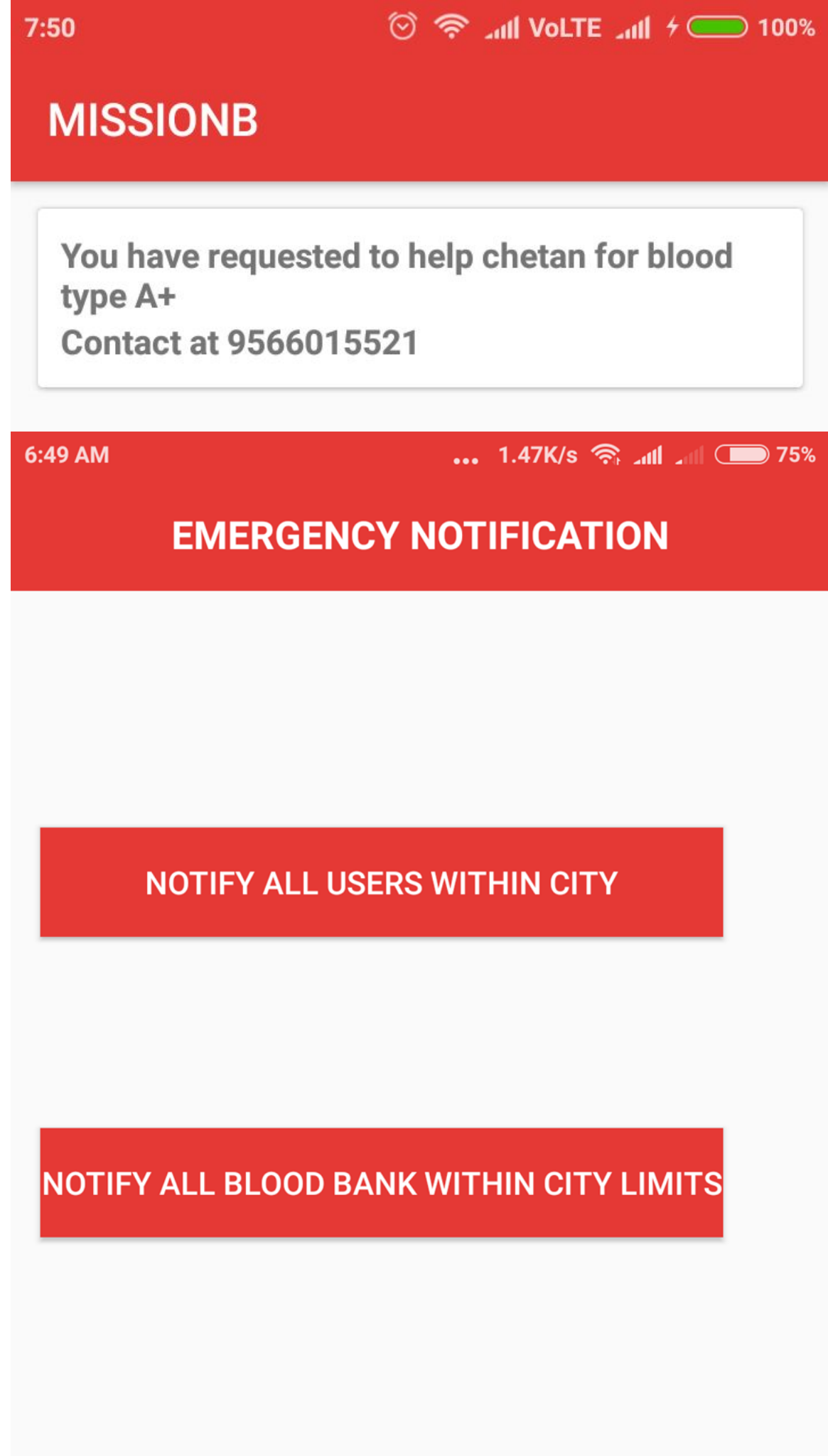
are visible in this section.

Requester have an option to

notify users or blood banks

within city limits if the blood

is required urgently.



#missionbsprite

10) SOCIAL MEDIA

CONNECT - We have connected our application with Twitter so that the recent blood related tweets can be easily seen.



DATABASE

The image shows two overlapping screenshots of the Firebase console. The top screenshot displays the 'Database' section for a project named 'blood'. It shows a JSON tree structure with a 'posts' array and a 'profile' object. The 'profile' object contains fields for 'address', 'age', 'bloodgroup', 'gender', and 'image'. The bottom screenshot displays the 'Authentication' section, showing a table of users with columns for Identifier, Providers, Created, Signed In, and User UID. The table lists five users, all created on February 24 or 25, 2018.

Database Section:

```
blood-59479
├── posts
└── profile
    ├── KF8uhSBfX5Y2M6OU2eiBaWzstmH2
    │   ├── address: ""
    │   ├── age: "21"
    │   ├── bloodgroup: "Not Selected"
    │   ├── gender: "Female"
    │   └── image: "https://firebasestorage.googleapis.com/v0/b/blood-59479/storage/objects/profile-KF8uhSBfX5Y2M6OU2eiBaWzstmH2.jpg?alt=media&token=..."
```

Authentication Section:

Identifier	Providers	Created	Signed In	User UID
samfisher123@gmail.com	Google	Feb 25, 2018	Feb 25, 2018	DxprqyNCSIXdE83B89h5ktLkBaE2
chetan@gmail.com	Google	Feb 24, 2018	Feb 24, 2018	KF8uhSBfX5Y2M6OU2eiBaWzstm...
ritika9494@gmail.com	Google	Feb 25, 2018	Feb 25, 2018	PP9qJq1IirOGWVuZsvkqd5QGj4f1
varu@gmail.com	Google	Feb 24, 2018	Feb 25, 2018	SFnWH6b7LUUVRAId03SIQ2pg2gy2
subbusai@gmail.com	Google	Feb 24, 2018	Feb 24, 2018	VPyI1FycFOqiUvJSUoJDJJ0Imc2

POTENTIAL USERS

The scalability of the apps is not limited to any restrictions.

It has its expansion and usage all over the public users of the app.

IMPACT OF THE PRODUCT

Blood is one of the requirements which is always immediate.

We can never predict when a person might end up in an accident and require blood. Our application will definitely help interconnecting all the blood requesters with people who are willing to donate blood in the world.

Social impact :

Connecting all the blood needy ones with blood donors can help to create a big change over saving lives.