

ABSTRACT

The objective of this project is to create an open chat platform where strangers and known people can chat with each other. Networking is very important in current industrial scenario and what's better than having a formal/informal communication to new people. This is where chat application come in place and make life easier by allowing you to start a conversation with anyone around the globe. But, having an open to all platform is sometimes a risk to privacy and should be tackled with appropriate methods, here B.T includes the Request feature which bounds people to first get connected and then start a conversation.

Been Talking focuses on:

- Primary target audience will be teenagers.
- Connecting people on a virtual platform for a better networking or relation.
- Creating and easy to use interface for all age groups.
- Easier registering options.
- Not asking for unnecessary permissions.
- Real-time updating of data for a smooth and convenient throughout experience.

DEVELOPMENT

Project Analysis:-

Android Studio: Android Studio supports all the many programming languages like Java, C++, and more. It has a flexible Gradle-built which supports many dependencies to import and use in your project.

Firebase as database: Google's Firebase is an application support database that empowers designers to foster iOS, Android and Web applications with constant support from Google. Firebase is a great tool for beginners to get used to real-time database and have a smooth experience.

XML for application plan: Extensible Markup Language is a structuring markup language and a designing tool. It characterizes a bunch of rules for encoding records in a configuration that is written in such a simple manner to allow human and machine both read it effectively.

Java for logistics: It is simple and high level programming language, java 18 has been used which support multiple libraries like Picasso, Arthurhub for face recognition.

Open source libraries:-

Picasso Image Retrieval: This is a powerful image downloading **library** that is available for free to use in **Android**.

ArthurHub: Efficient, customizable in different manner, optimized for different tasks and simple image editing **library** available for **Android**.

CircleImageView: A fast circular ImageView perfect for profile images. This is based on RoundedImageView from Vince Mi which itself is based on techniques recommended by Romain Guy.

Glide: It is an efficient open source image loading framework for Android which wraps memory and disk caching, and resource pooling into a simple and easy to use interface.

Lottie: Lottie is a file format for graphics animation. Which lets you create great animation for free.

System Used:-

Laptop for development: Asus tuf A-15.

Mobile: To test application in real time. (Android 7 and above)

OS: 64-bit window 11 Home.

PROJECT FLOW

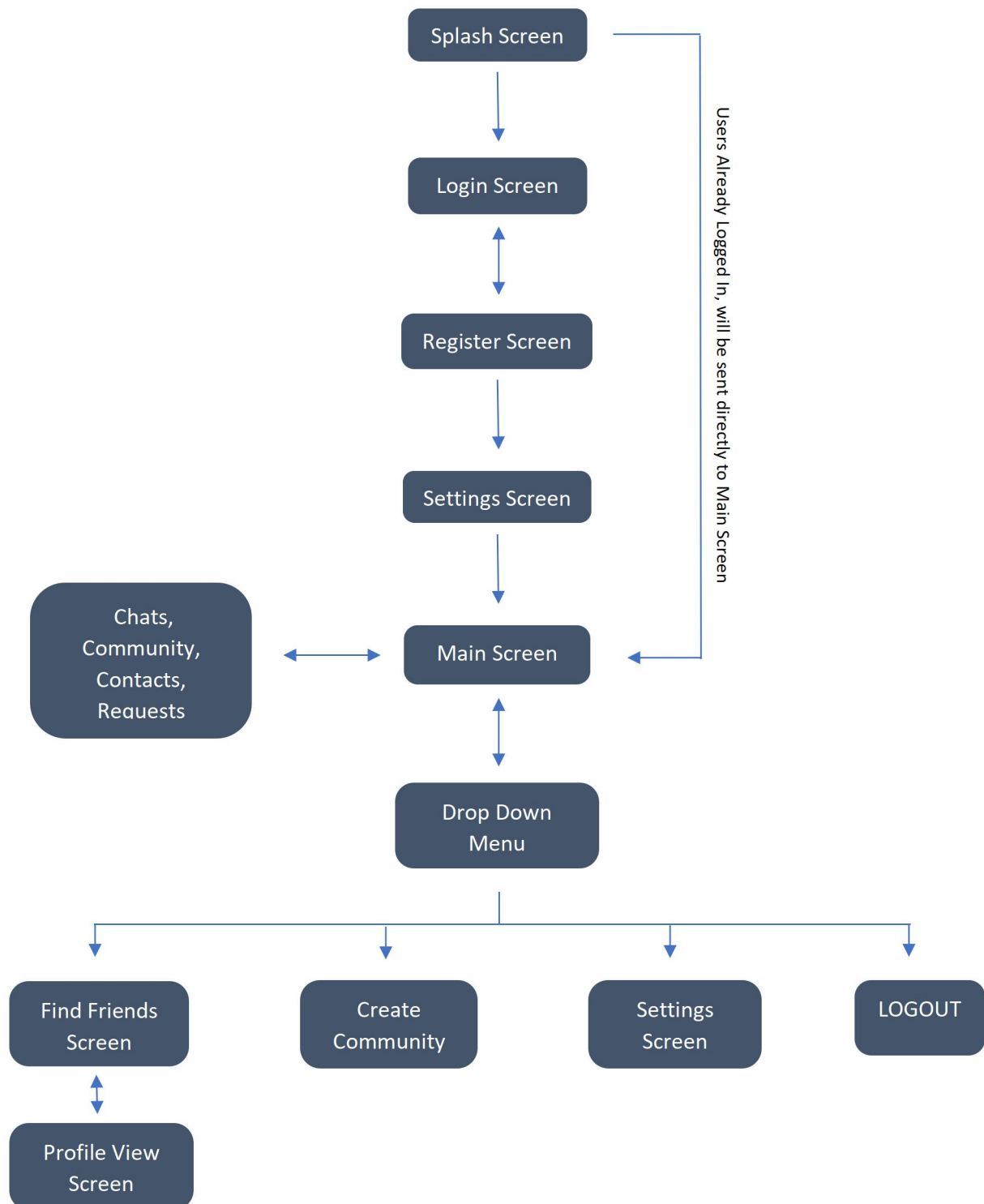


Fig 1. Flow of the application for New and old User

WORKING

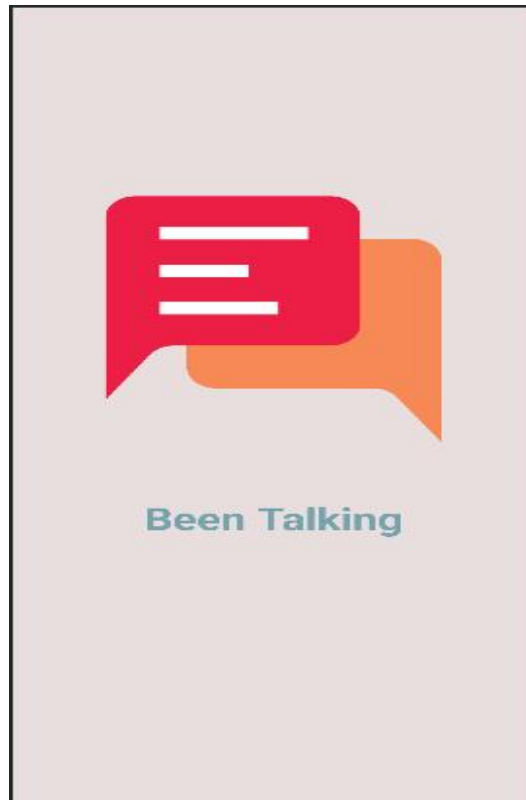


Fig 2. Splash Screen

- Splash Screen:**
1. First screen to launch on fresh start of application.
 2. Contains animation that lasts for 3 second.
 3. After the animation new users are sent to Login screen and existing users are sent to Main screen.

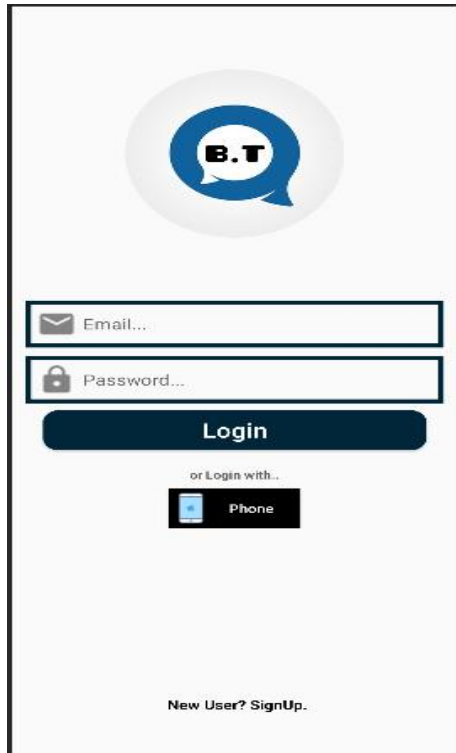
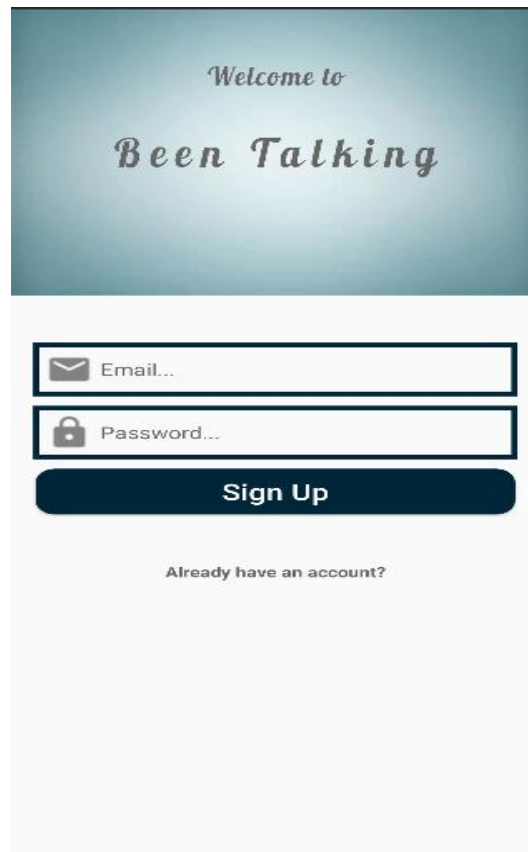


Fig 3. Login Screen

Login Screen: 1. The Login screen contains:

- LOGO
- 2 input fields (Email and Password)
- 2 buttons (Login and Phone Login)
- 1 text link (New user SignUp)

- 2. Existing users have to enter Mail and password to login.
- 3. New users have to SignUp using text link at the bottom OR login with. Phone login button.
- 4. User that logged in with Phone no have to get OTP each time they login.
- 5. After successful Login/SignUp user will be directed to directly main screen each time unless user LOGOUT on its will.

The image shows a mobile application register screen. At the top, there is a teal header with the text "Welcome to" in a small, italicized font, followed by "Been Talking" in a larger, bold, italicized font. Below the header, there are two input fields: the first is labeled "Email..." with an envelope icon, and the second is labeled "Password..." with a lock icon. Below these fields is a dark blue button with the text "Sign Up" in white. At the bottom, there is a text link that says "Already have an account?".

Welcome to

Been Talking

Email...

Password...

Sign Up

Already have an account?

Fig 4. Register Screen

Register Screen: 1. The Register screen contains:

- Welcome image
 - 2 input fields (New Email and Password)
 - 1 buttons (Sign Up)
 - 1 text link (Go back to login screen)
2. New users can enter their mail and create password to login.
3. Text link is to go back to login screen in case user misclick on Signup.
4. After successful account creating user will not have to login
he/she will be redirected to Setting page automatically.

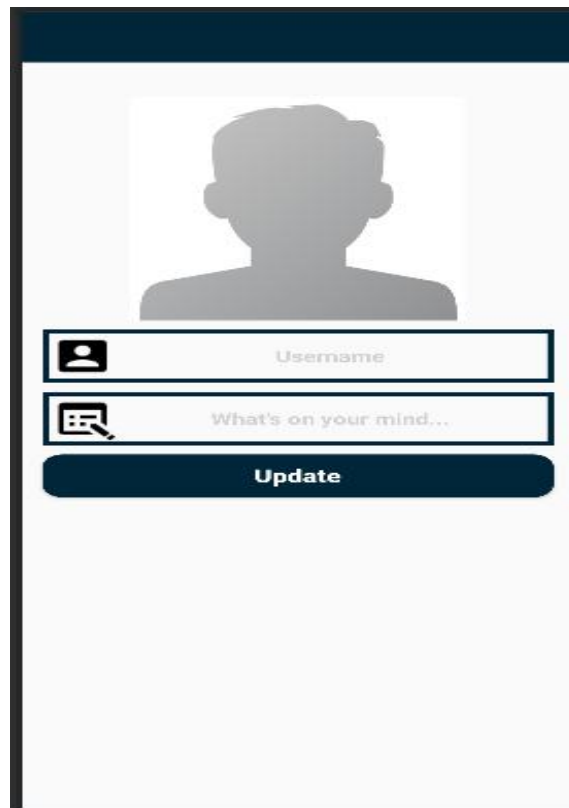


Fig 5. Settings Screen

Settings Screen: 1. The Settings screen contains:

Image Button (Select profile image)
2 input fields (Username and Status/Bio)
1 buttons (Update)

2. User must have a username to proceed.
3. Image container redirects user to storage where 1 image can be selected for display.
4. Bio and image is optional and depends on the user to put.
5. Settings can be updated anytime from Main screen drop down menu.

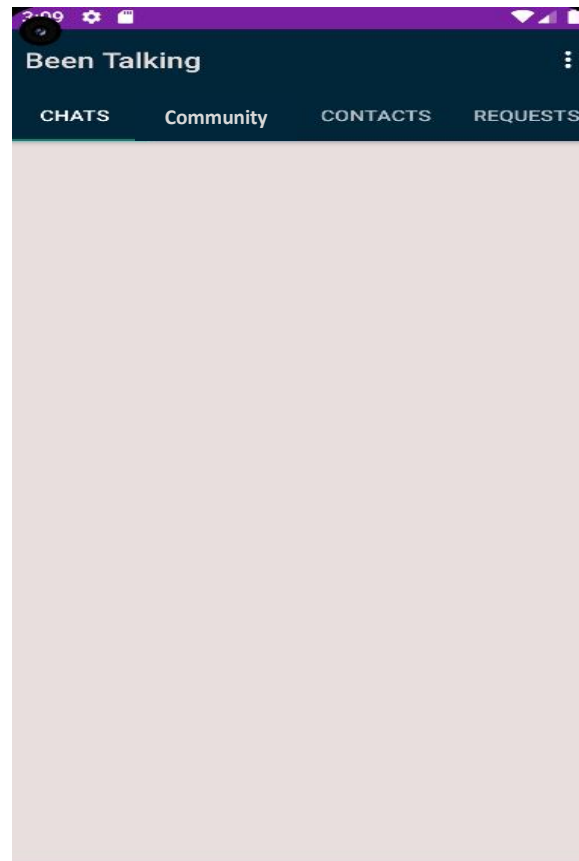


Fig 6. Main Screen

- Main Screen:**
1. The Main screen contains:
 - 4 fragments (Chats, Community, Contacts, Request)
 - 1 drop down menu.
 2. Main page is the heart of application as every other page can be accessed from here.
 3. All the fragment are siblings pages and user can slide or tap on buttons to access fragments.
 4. Each fragment is a container having different functionality.
 5. There is a drop down menu on Main page explained in next slide.

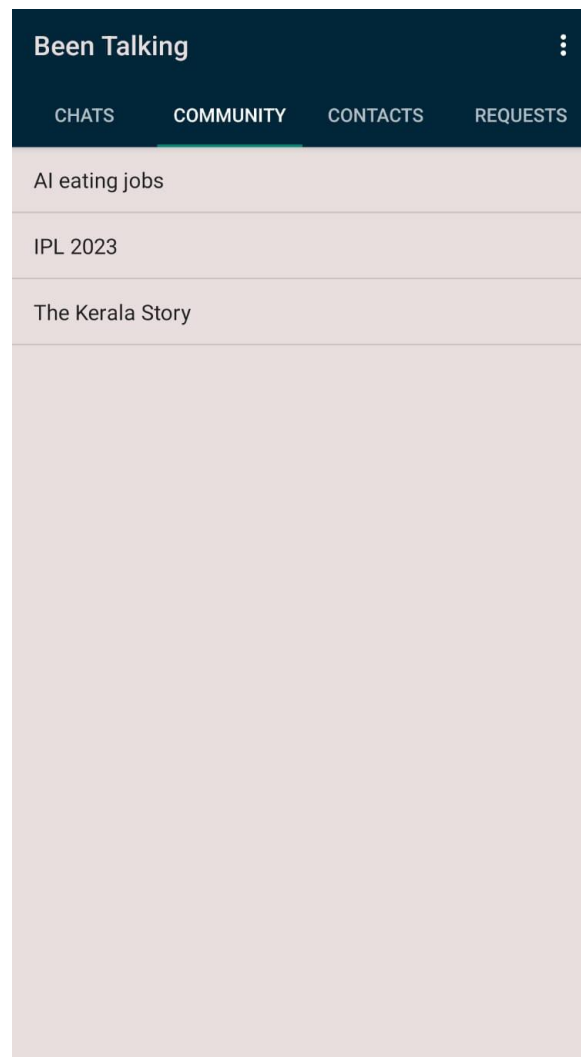


Fig 7. Community Screen

Community Screen:

1. Community page shows all the community chats started.
2. You can select any name and start chatting to the whole B.T community.

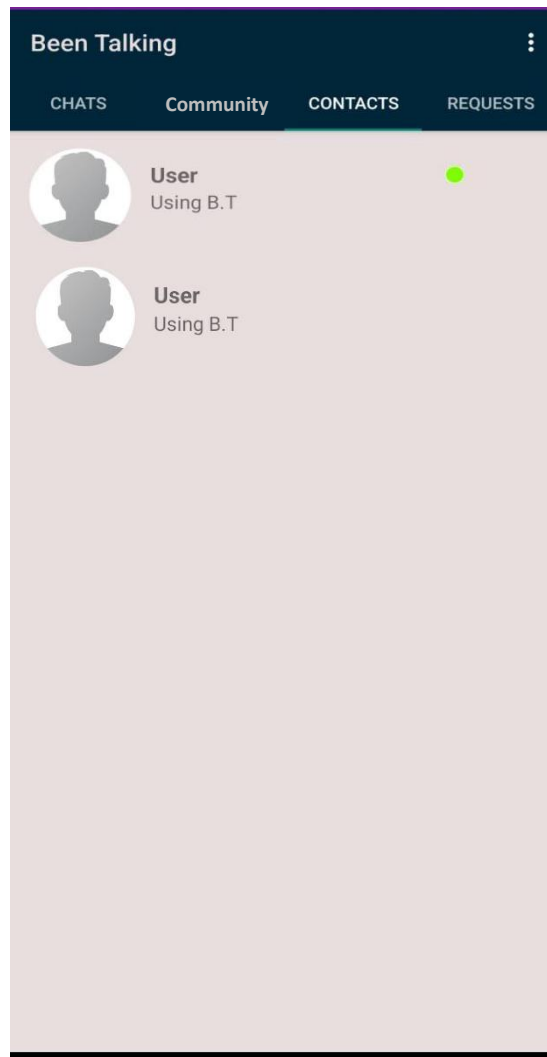


Fig 8. Contacts Screen

Contacts Screen: 1. Contact frame shows Image, Name and Status of your friend.
2. A green dot will display against online friends.

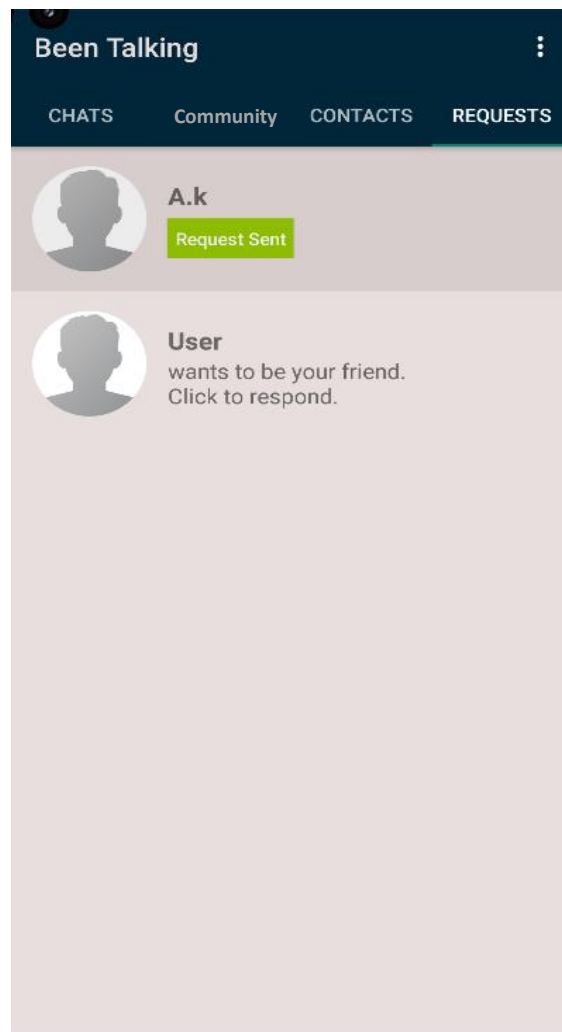


Fig 9. Requests Screen

Group Screen: 1. Request page contains:

Request sent

Request received

2. You can view who sent you friend request and click on it to reach.
3. Your sent requests are also displayed in the request section and can be canceled at any time.

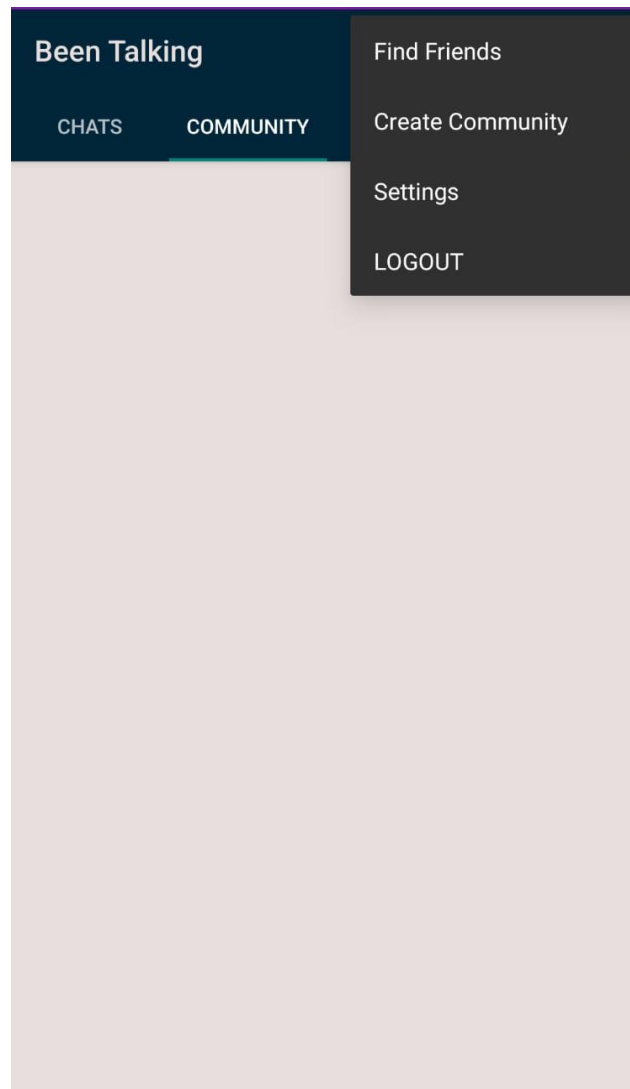


Fig 10. Drop Down Menu (Main Screen)

- DropDown Menu:**
1. The Drop Down menu contains:
4 Buttons (Find Friends, Create community, Settings, LOGOUT)
 2. Each button on the menu leads to a different activity as their name suggest.
 3. All the activities and their subsidiaries are explained further
 4. LOGOUT button will simply make user sign out.

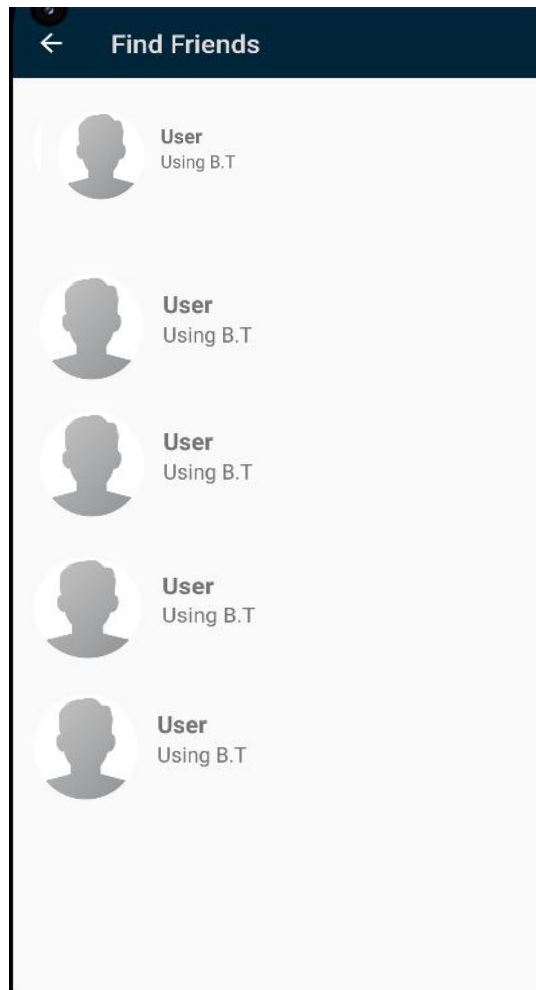


Fig 11. Find Friends Screen

- Find Friends Screen:**
1. All the user registered on B.T are listed in the find friends activity.
 2. You can click on any user to see their profile and send request.

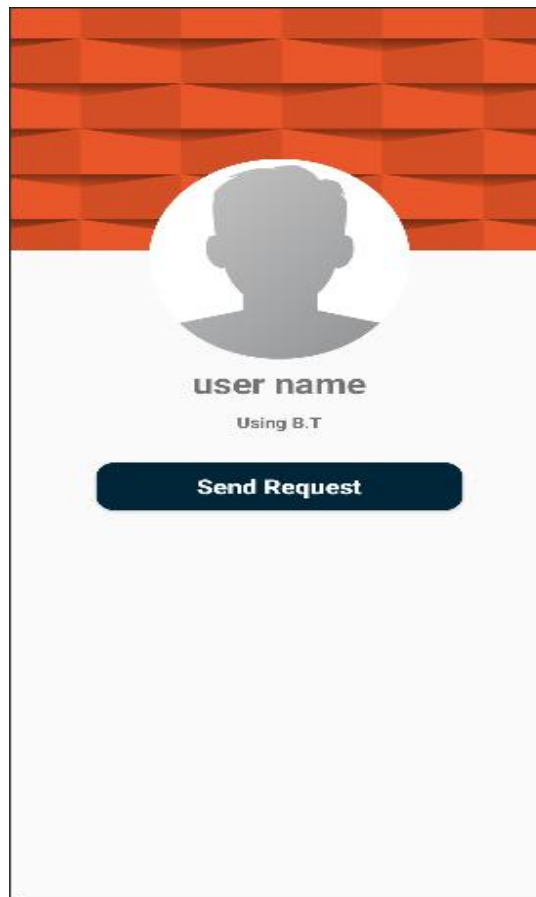


Fig 12. Profile Screen

Profile Screen: 1. User page contains:

Image view

2 labels (Name, Status)

4 buttons (Send, Accept, Cancel request for receiver & sender)

2. Image and status will be blank if user didn't choose to update them.

3. Each button has different usage and **Invisible** if there is no use of it.

4. A user can see its profile but no request option will be there.

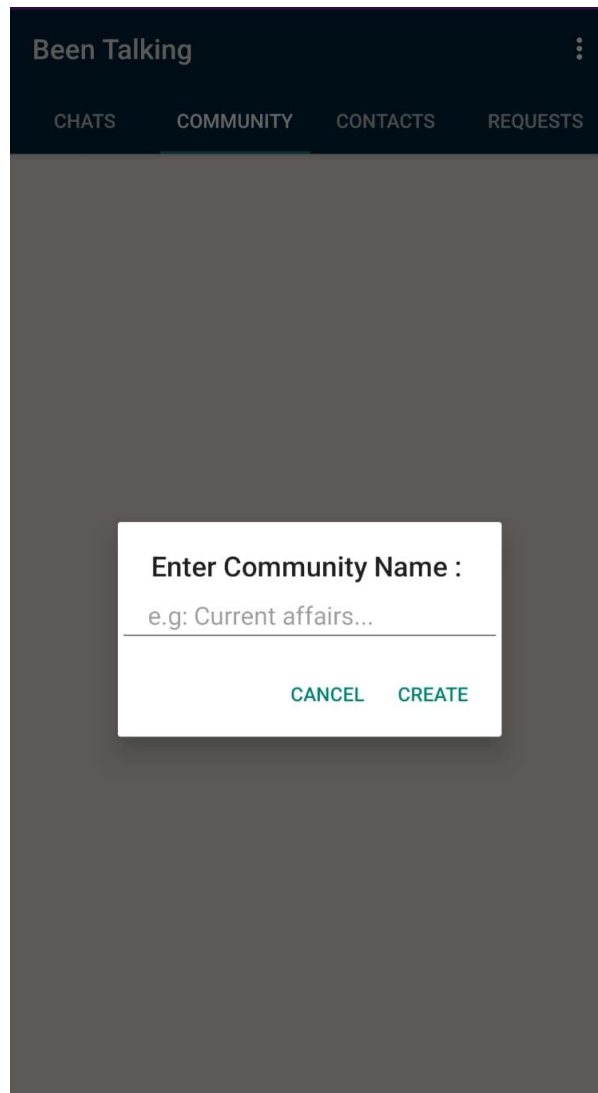


Fig 13. Create Community Dialog

- Create Community AlertBox:**
1. Alert box contains:
 - 1 text field (Enter Community name)
 - 2 buttons (Create and Cancel)
 2. From drop down menu on Main screen user can select to create a Community.
 3. A group will only require Community name.
 4. All the current users will become part of the Community.
 5. A member will have the option to leave the community.

REFERENCES

- [*https://github.com/bumptech/glide*](https://github.com/bumptech/glide)
- [*https://lottiefiles.github.io/lottie-docs/playground/builder/*](https://lottiefiles.github.io/lottie-docs/playground/builder/)
- [*https://github.com/square/picasso*](https://github.com/square/picasso)
- [*https://firebase.google.com/docs/android*](https://firebase.google.com/docs/android)
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- [*https://developer.android.com/docs*](https://developer.android.com/docs)