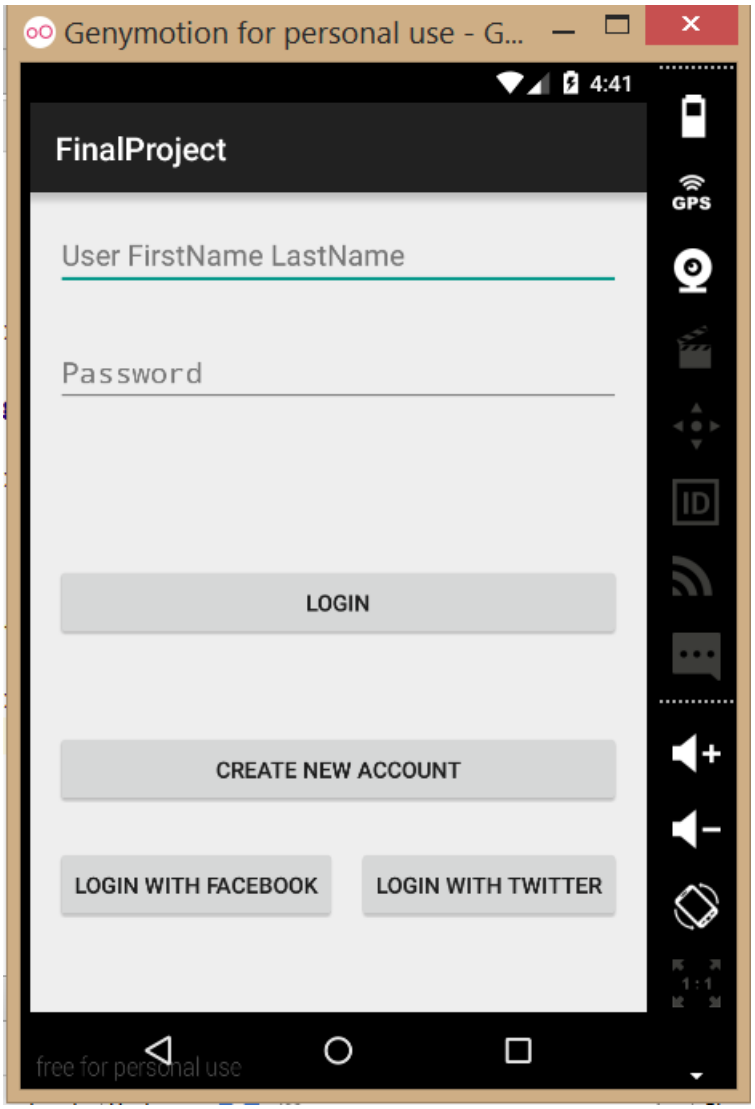
ITCS: 5180 – Final Project

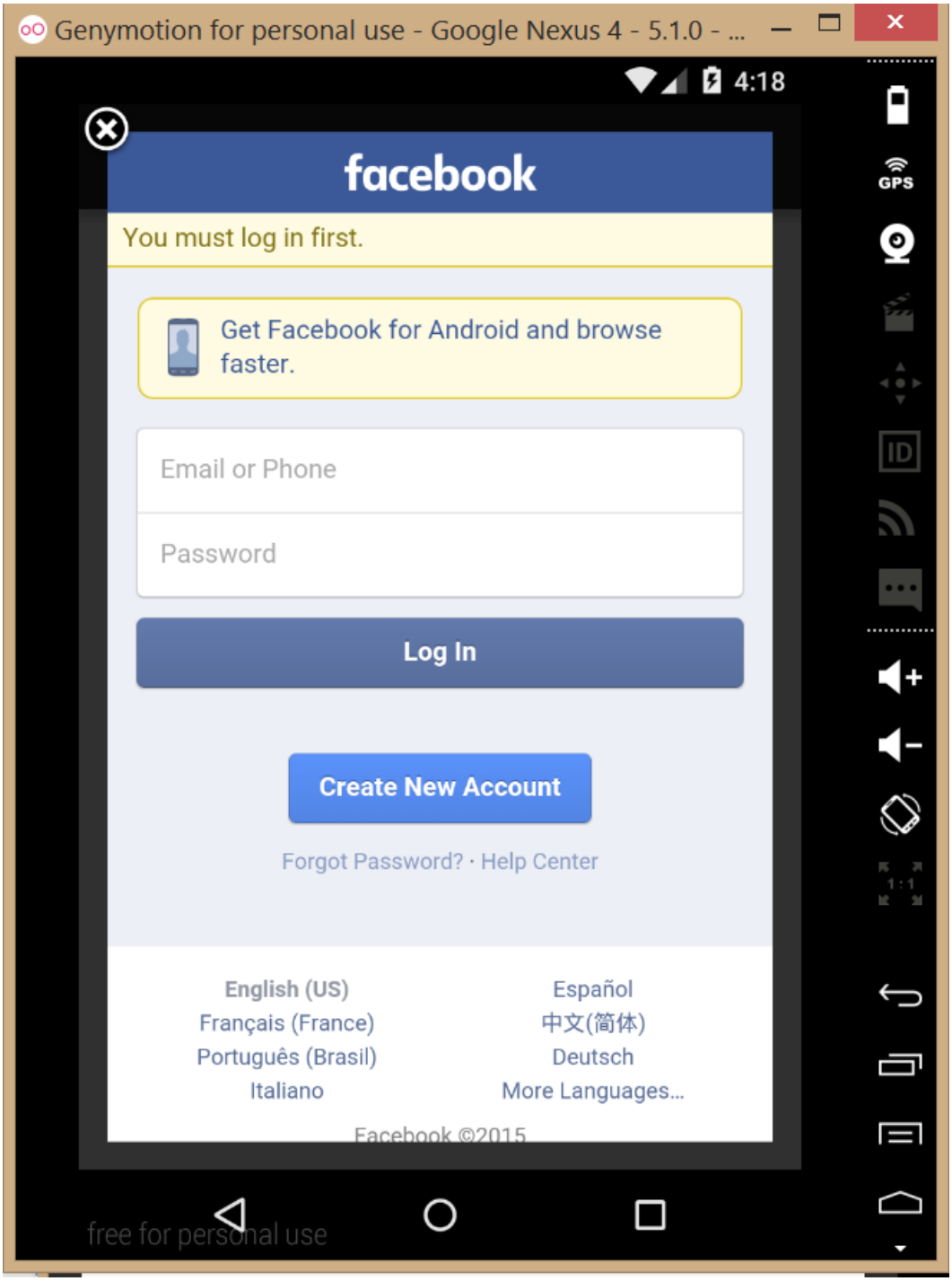
App Description:

The main purpose of this app is to allow users to share text and/or images. Users can also create albums and share it with other users. The main features of the app are described below:

1) Login:
   Users are required to login into the application before they can access any of the app features. Users can either create a new account using the app and login or they can login using Facebook or Twitter credentials.

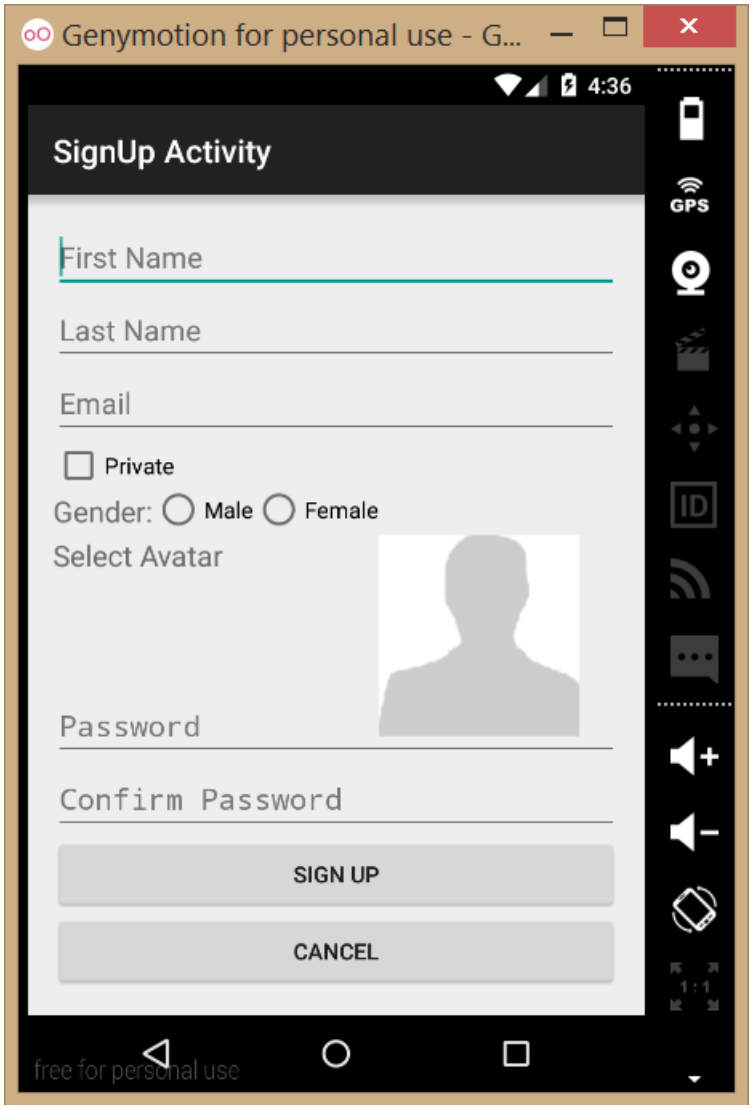


Login via Facebook:



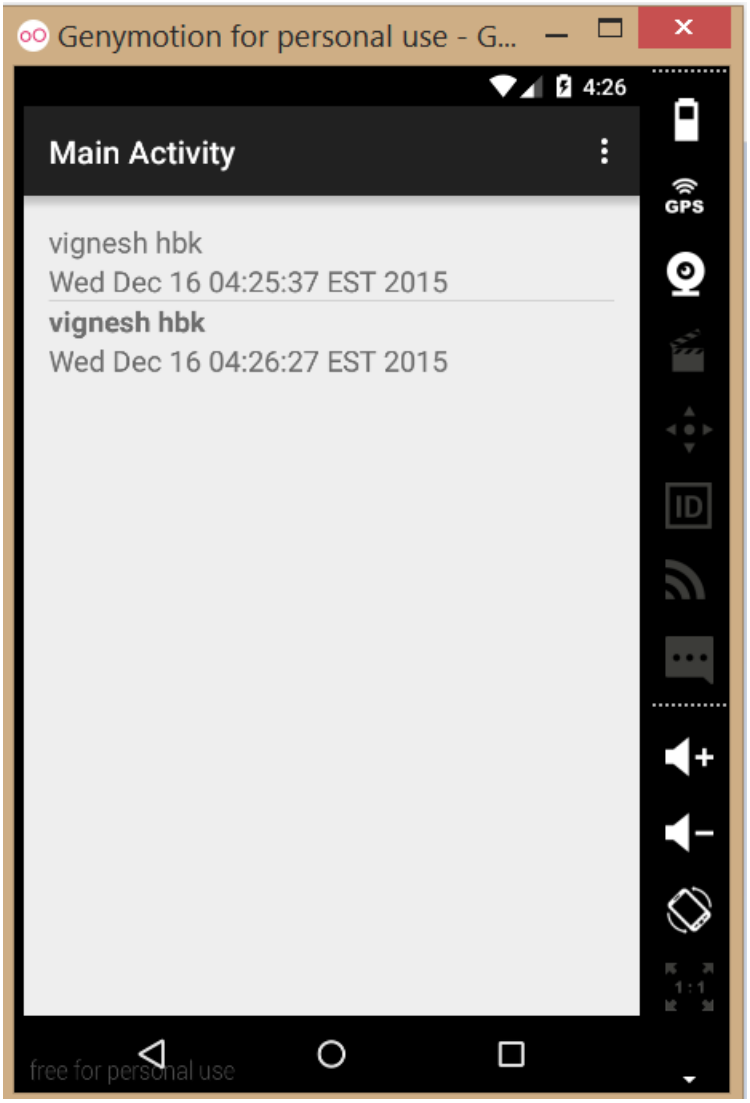
2) SignUp:

Users will have to provide FirstName, LastName, Email, Gender, Avatar image and Password. Users are also provided with an option to make their profile “Private” or “Public”. Only public profiles will be visible to other users.



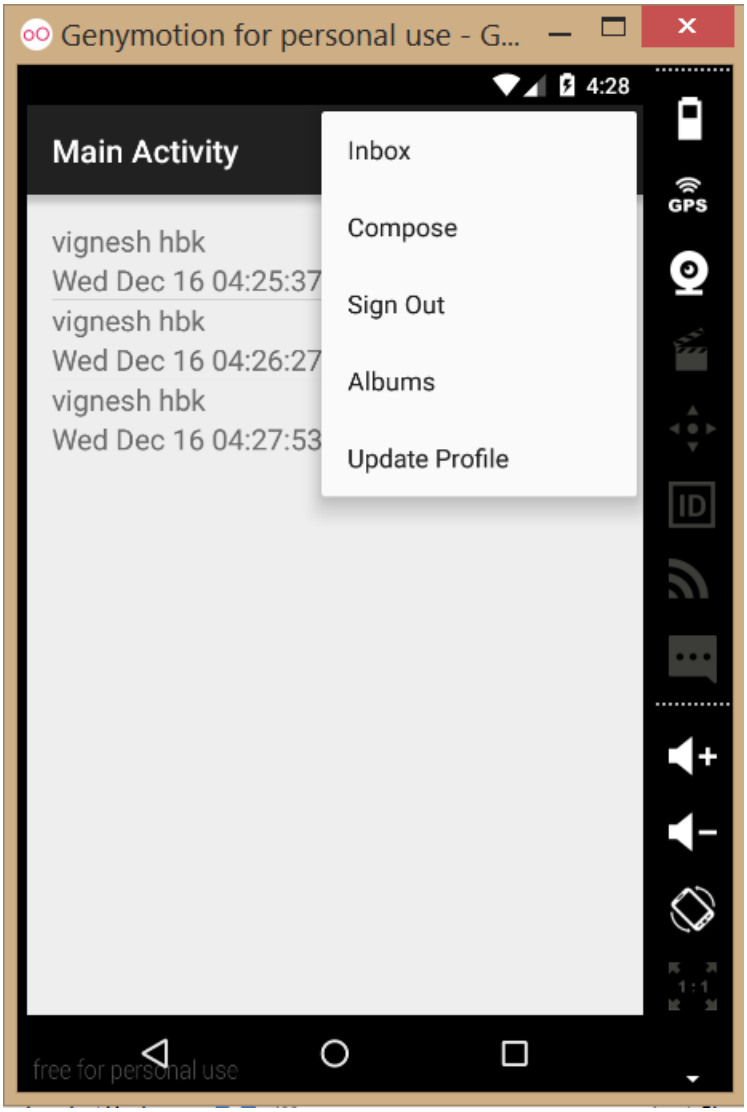
3) Inbox:

Upon successful login, users will be redirected to the main activity which also acts as the inbox. Unread messages are displayed in bold while read messages are displayed in normal font.



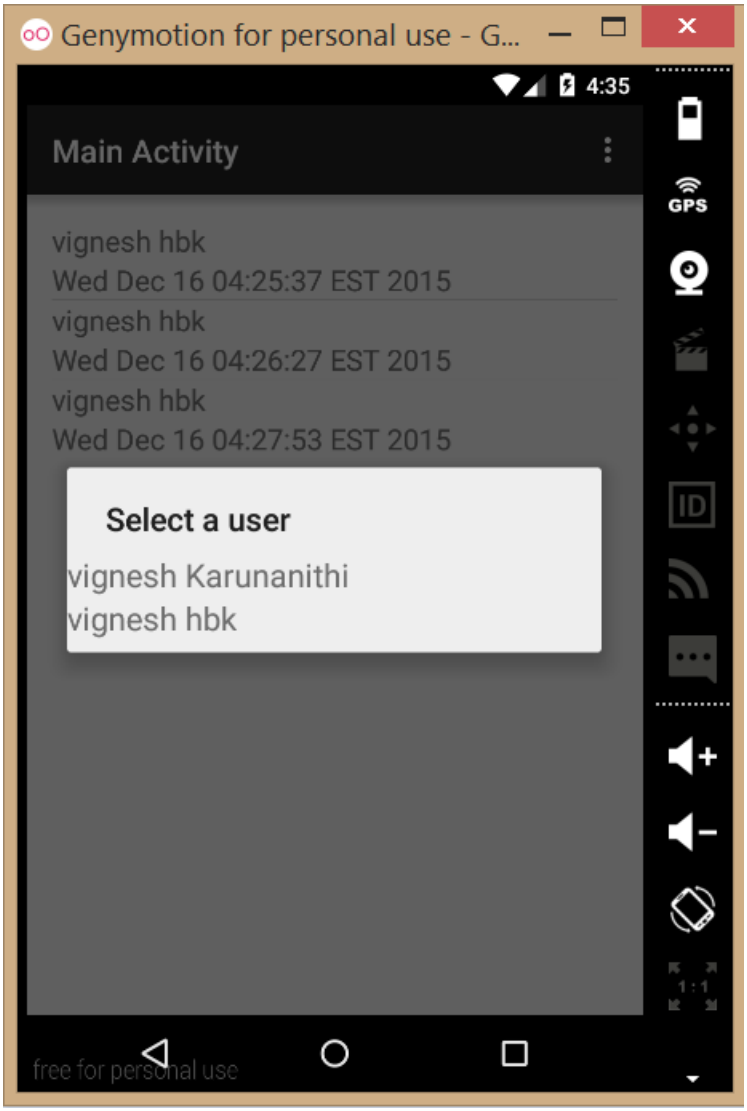
This activity also has menu items for other functionalities like:

a) Inbox
b) Compose
c) Sign Out
d) Albums
e) Update Profile

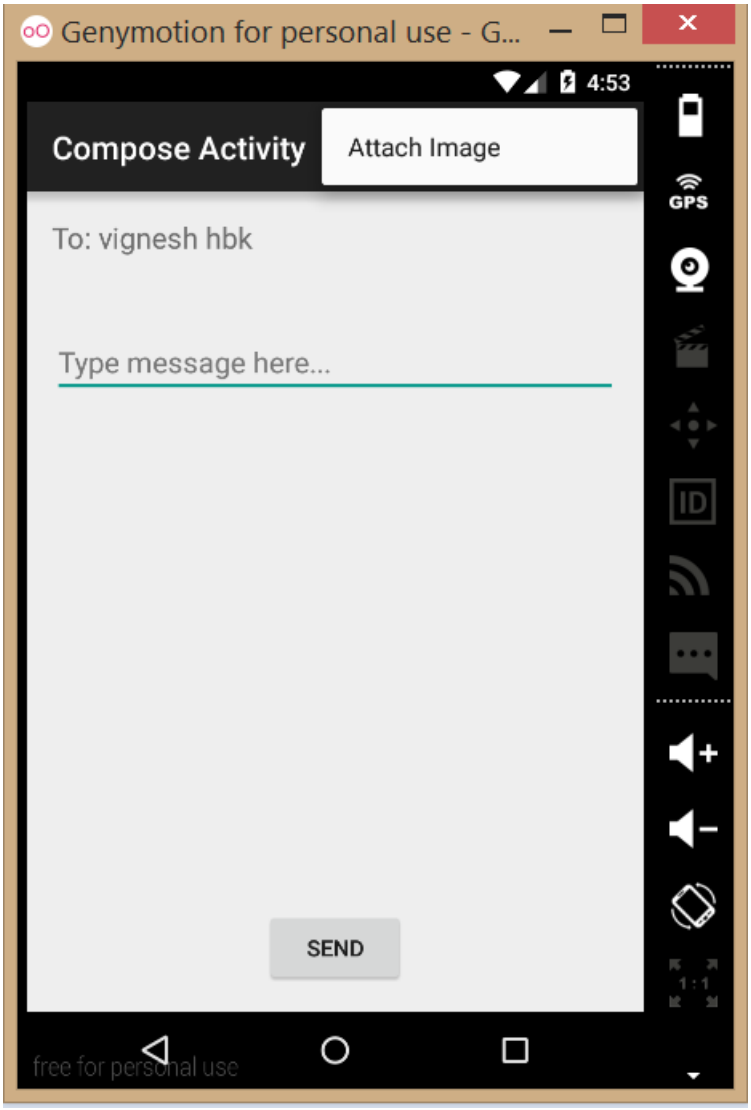


Inbox option is just used to refresh the inbox.

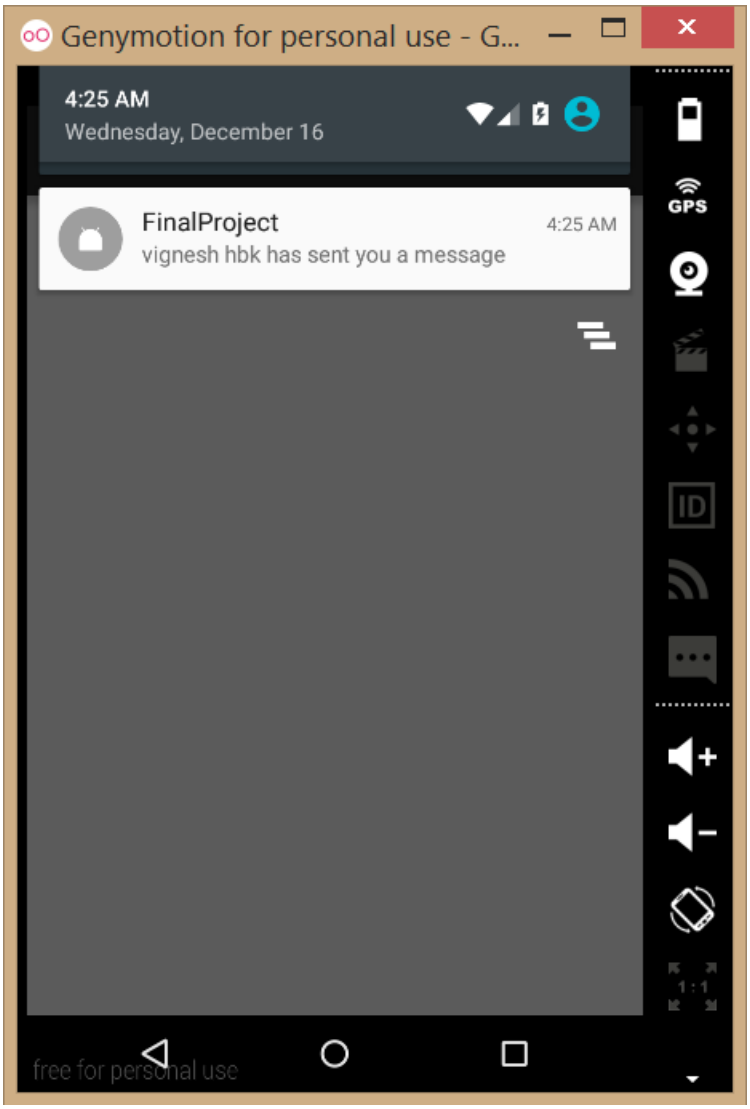
4) Compose option allows the user to send messages to other users. On clicking the “Compose” option, the available public users are displayed.



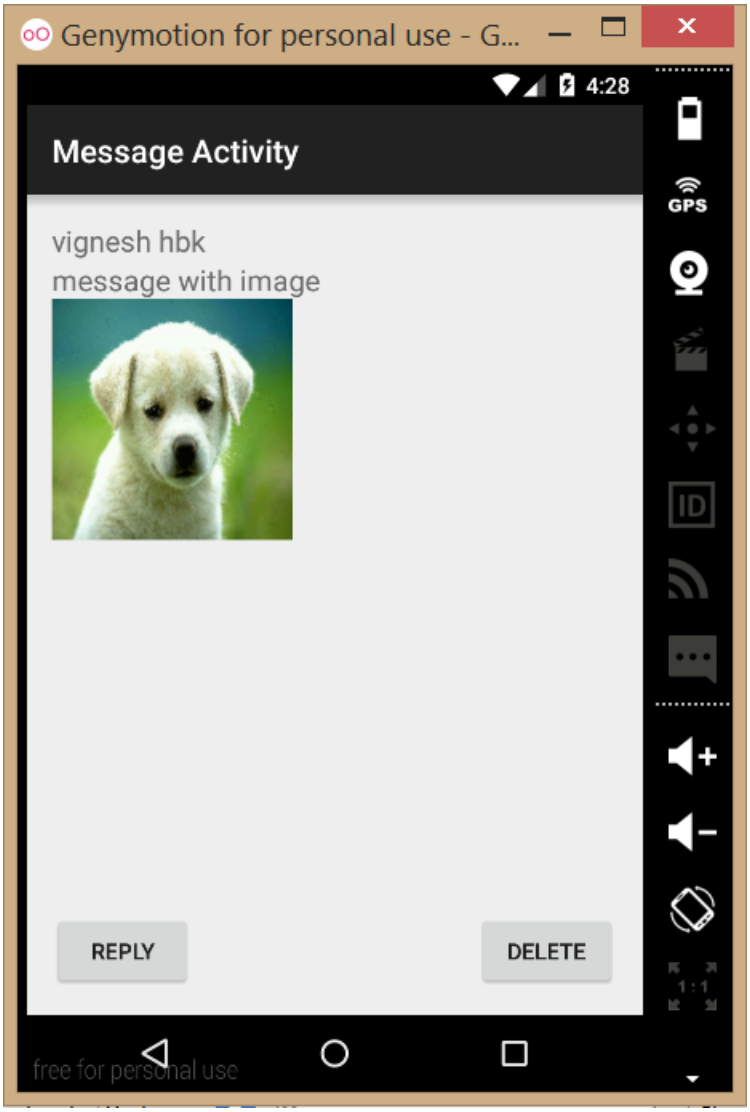
Upon selection of a user, the Compose Activity will be displayed. Users can send text messages and they also have an option to add images to their message.


Genymotion for personal use - G...
4:53
Compose Activity
Attach Image
To: vignesh hbk
Type message here...
SEND
GPS
free for personal use

Whenever a user sends a message, the recipient will receive a push notification regarding the message.

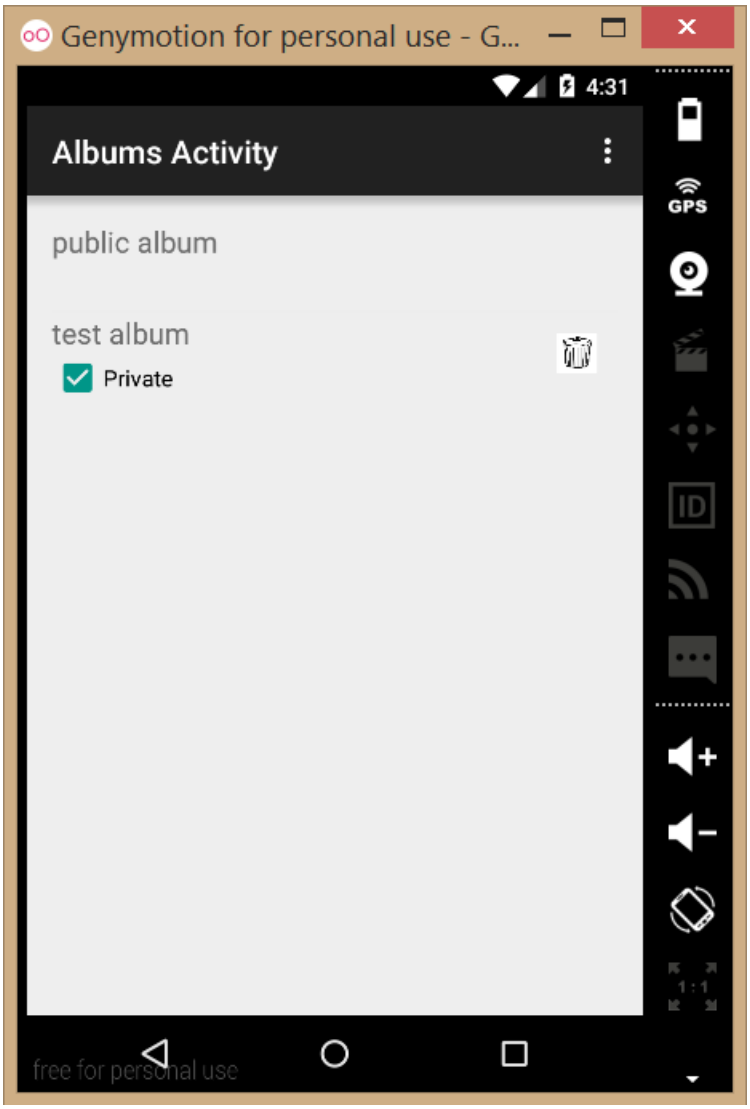


On tapping the message list item, the contents of the message will be displayed.

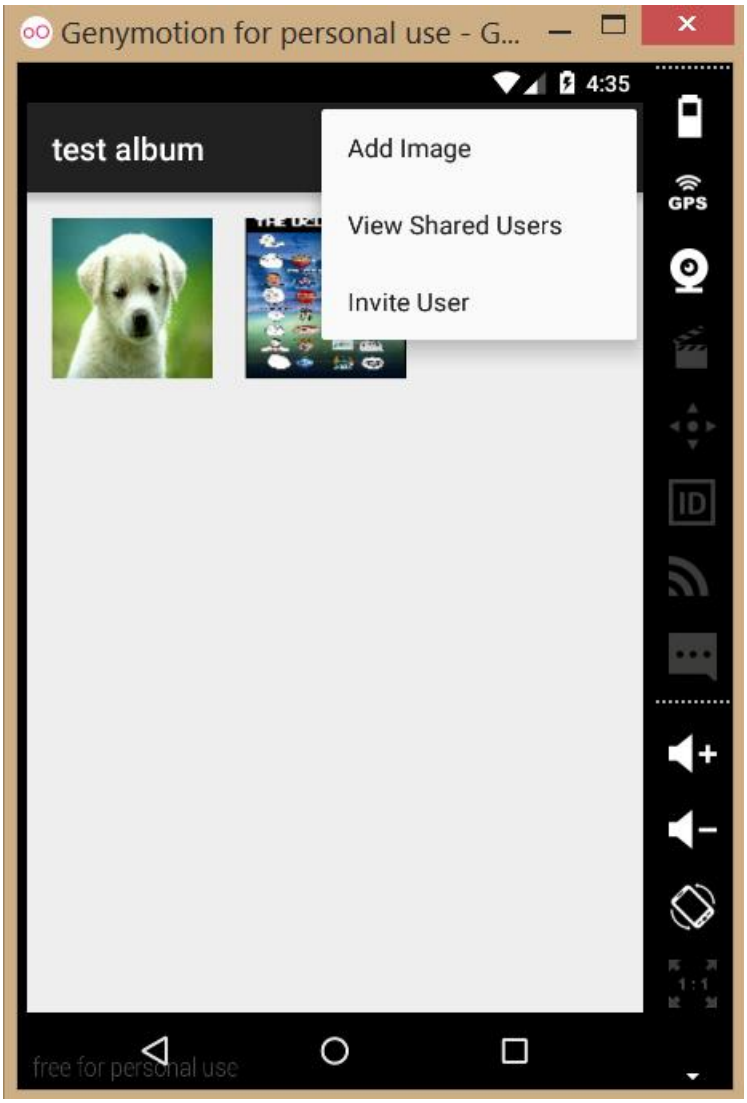


5) Albums:

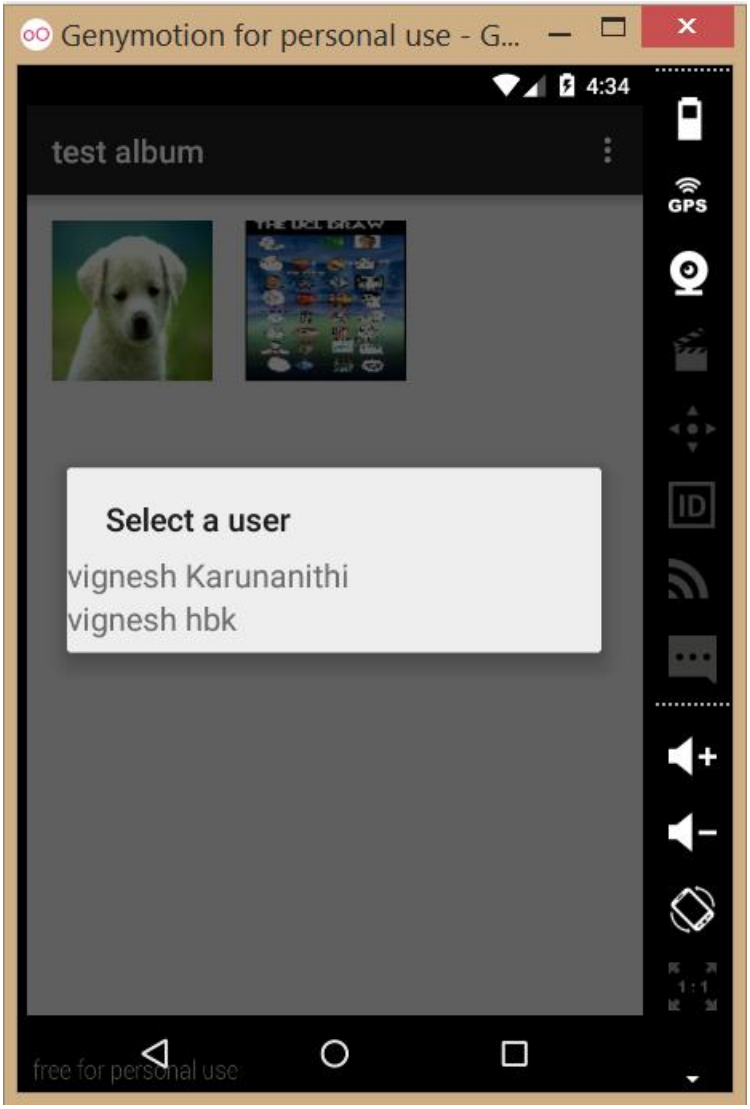
Users can create albums and share with other users. On selecting the “Albums” option from the menu, the list of albums owned by the user and shared by the user will be displayed. For those albums owned by the user, they will be allowed to either make the album private or public and also to delete them.



Tapping on an album will display the contents of that album. Users will also have options to “Add Image”, “View Shared Users” and “Invite User”.



Selecting the “Invite User” option will provide the invited user access to view and add images to that particular album. Invited users will also get a push notification regarding the invite.



Clicking on any of the images will display the image in an enlarged manner. If a particular image is uploaded by another user other than the owner, then the owner will get a push notification regarding the new image and it will not be visible to others until the owner verifies that image. Once the image is verified, the uploader will get a push notification stating that the image has been verified by the owner.

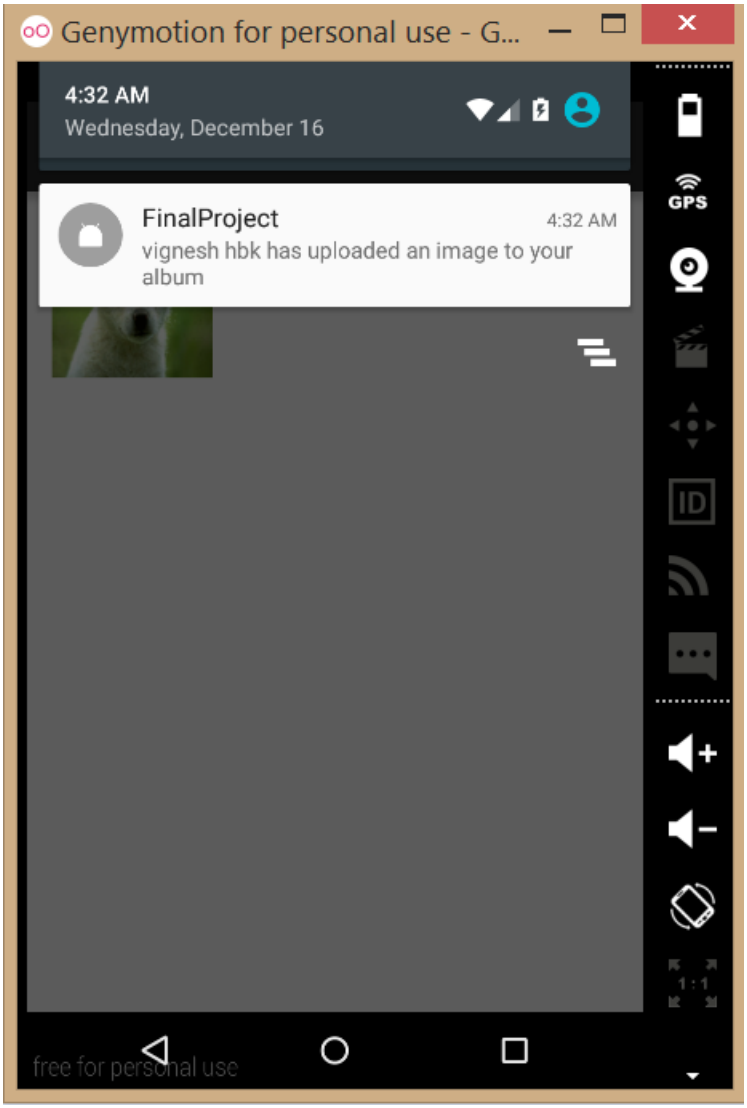

Genymotion for personal use - G...
4:32 AM
Wednesday, December 16
FinalProject
4:32 AM
vignesh hbk has uploaded an image to your album
GPS
free for personal use

Image uploaded by another user and is pending verification by the owner

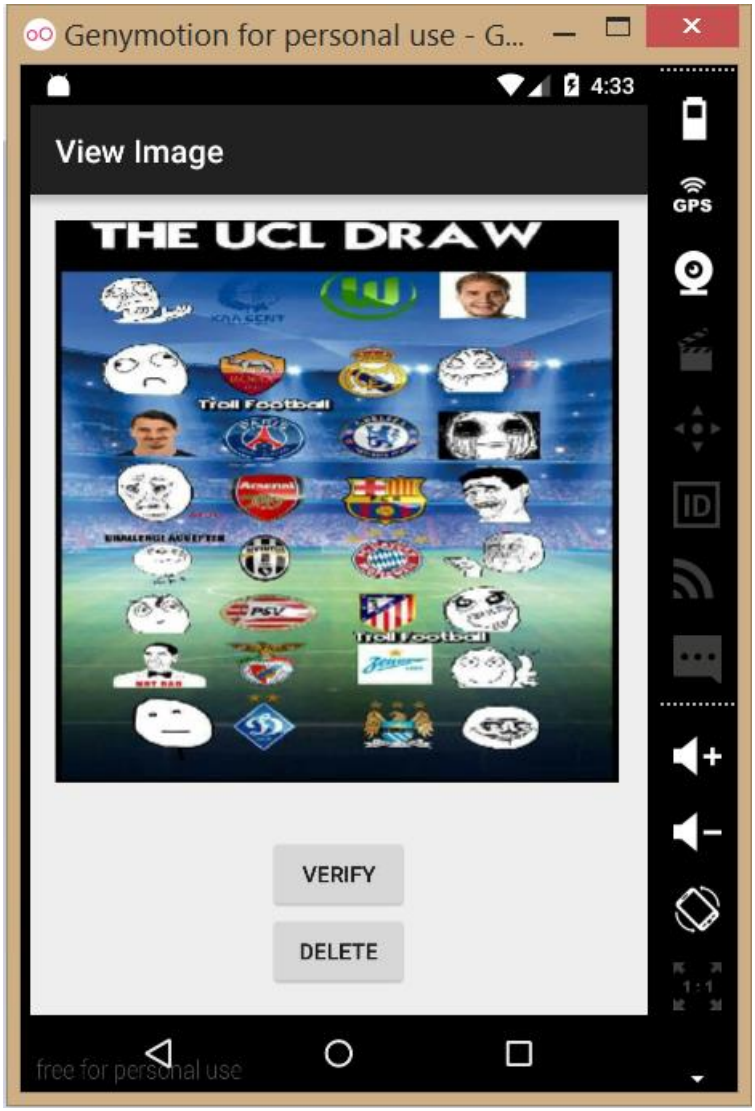
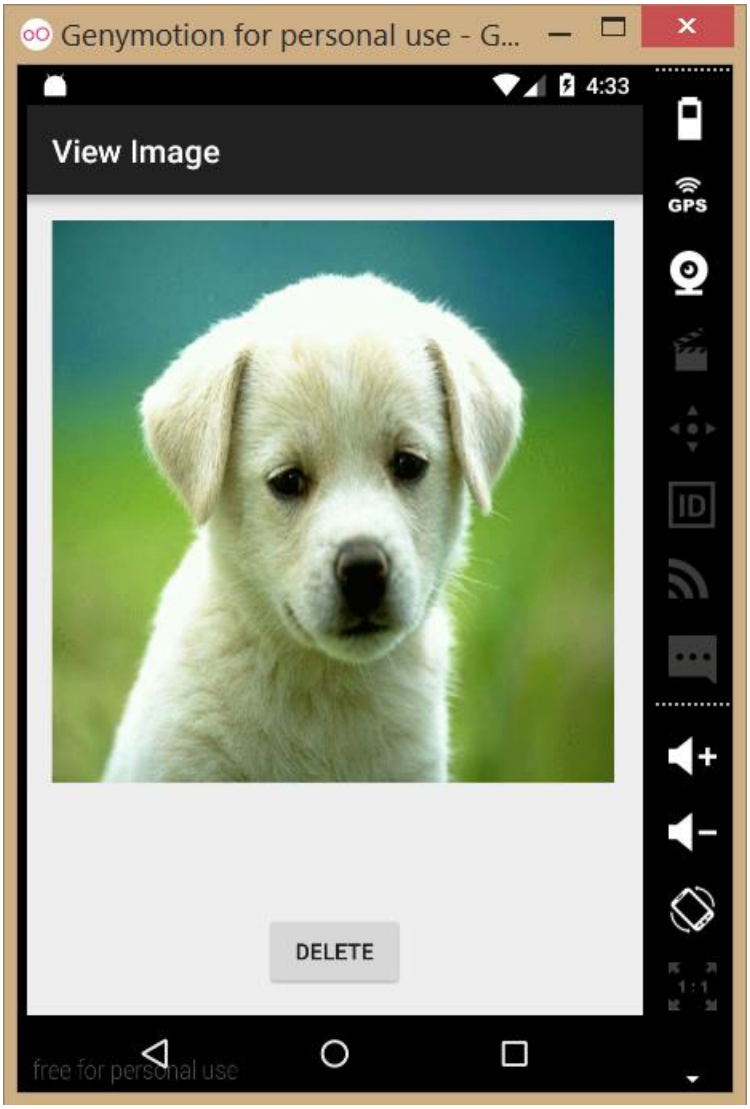
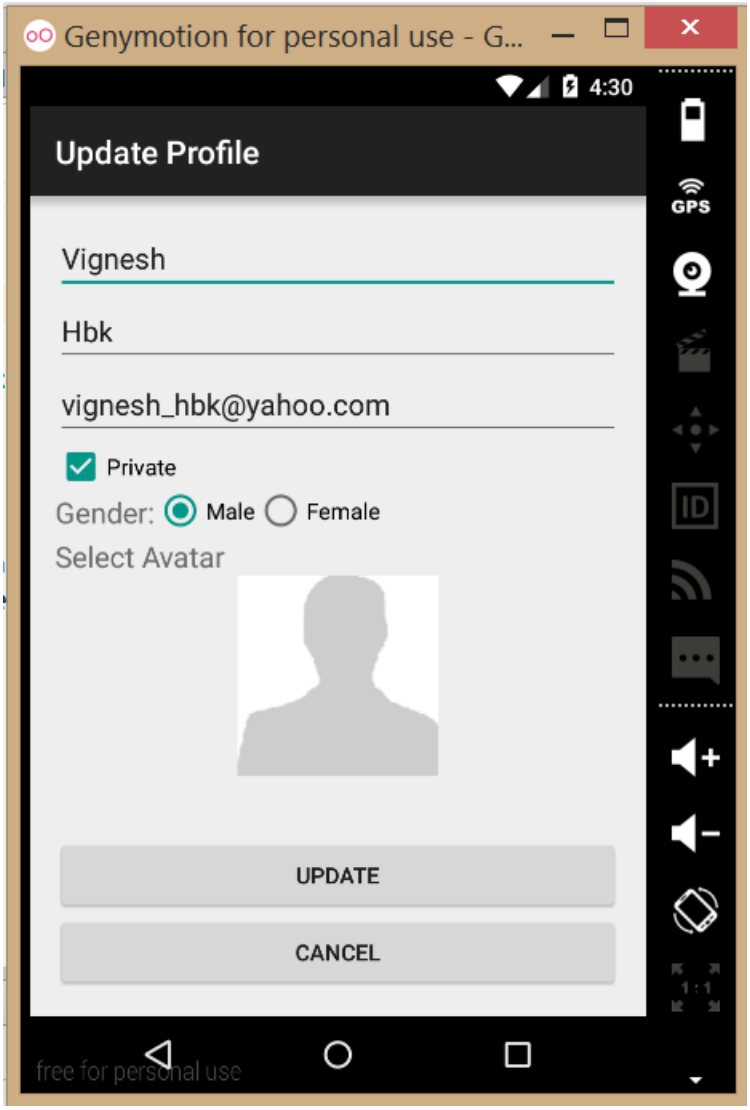


Image uploaded by the owner/ it is already verified.



Users can update their profile by selecting “Update Profile” from the menu.



The submitted app has almost every functionality implemented as the initially proposed app except for the following:

1) Users must be able to control if they receive push notifications or not
2) Users must be able to view other user’s profile
3) Users must be able to view the list of users with whom an album has been shared

Design:

This app has a very simple design. It has the following activites:

1) Login – Handles user login
2) SignUp – Adds a new user to the application
3) UpdateProfile – Allows the user to update their profile

4) Main – Functions as the message inbox
5) Message – Displays the message content
6) Compose – Allows users to send mails to other users
7) Albums – Displays a list of albums that is accessible by the user
8) AddAlbum – Allows users to add new albums
9) View Album – Displays the contents of an album
10) View Image – Displays the image in an enlarged manner and allows owners to verify images uploaded by other users

The database (Parse) has the following ParseObjects (classes):

Installation – Used for handling push notifications

User – Maintains the list of users and their profile information

Message – Stores the messages sent by users

Albums – Stores the albums created by users

AlbumImage – Acts as a mapping table between the images uploaded to an album and the album itself

SharedAlbums – Acts as a mapping table between the users invited to an album and the album itself

Since all objects used in the application are either ParseUser or ParseObject objects, there is not complex design pattern implemented in this app.

Regarding the DB, the mapping table “SharedAlbums” acts as a many to many relationship where one or more users can be linked with one or more albums.