

## ASSIGNMENT NO. 1

### MAD and PWA Lab

**Aim:** You are suggested to select features from the Application which you will be developing. The features should comprise of

1. Common widgets
2. Should include icons, images, charts etc.
3. Should have an interactive Form
4. Should apply navigation, routing and gestures
5. Should connect with FireBase database

You may select and submit 5 to 10 screenshots of the Application showcasing features you will be working on. Write a description in around 500 words of the same.

The application choosed is **Instagram**. Instagram from Facebook (now **Meta**) allows you to create and share your photos, stories, and videos with the friends and followers you care about. This app helps to connect with friends, share what you're up to, or see what's new from others all over the world.

**Firebase** will be used for :

1. Storing the registration details which will be :

- Full Name
- Email
- Password
- Phone Number
- Username
- Bio
- Profile Image

The Email/Phone Number and Password will be used while logging into the application

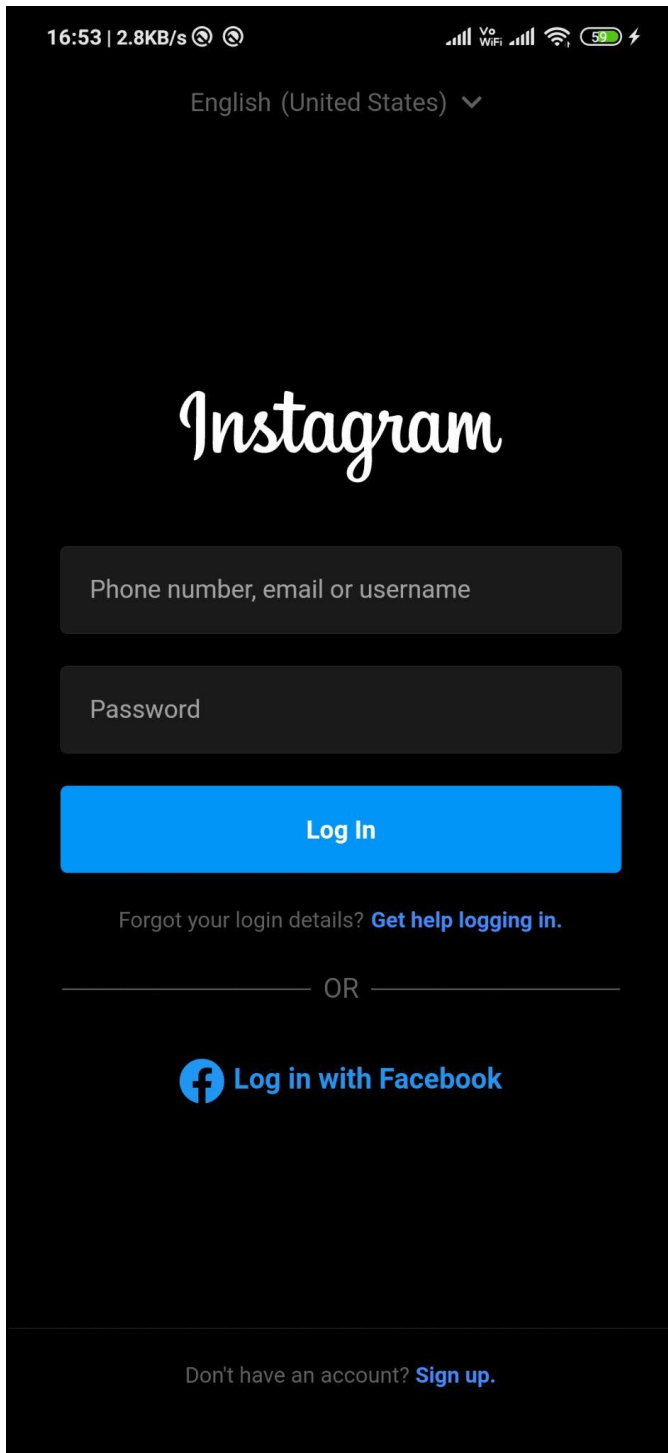
2. Storing the posts uploaded by the user along with :

- Likes on the post
- Comments on the post

3. Storing the count of followers and following of the user

**Interactive Form** will be used in LogIn and Register part of the application. Also later onwards, will be implemented in editing the profile details in the Profile Screen.

## Login Screen



This is the login screen. Here the widgets will be used for inserting :

1. Instagram Logo (SVG File)
2. Text field inputs for entering :
  - Phone number/Email/Username
  - Password
3. Log In button to log in to the home screen
4. Hyperlink for the “Sign up.” which will redirect to the custom Sign up screen
5. Facebook Icon
6. Dropdown for choosing the language

Widgets which will be used here are :

1. Scaffold
2. SingleChildScrollView
3. Column
4. SizedBox
5. Row
6. Icon
7. SvgPicture
8. Container
9. Text
10. InkWell

## Home Screen

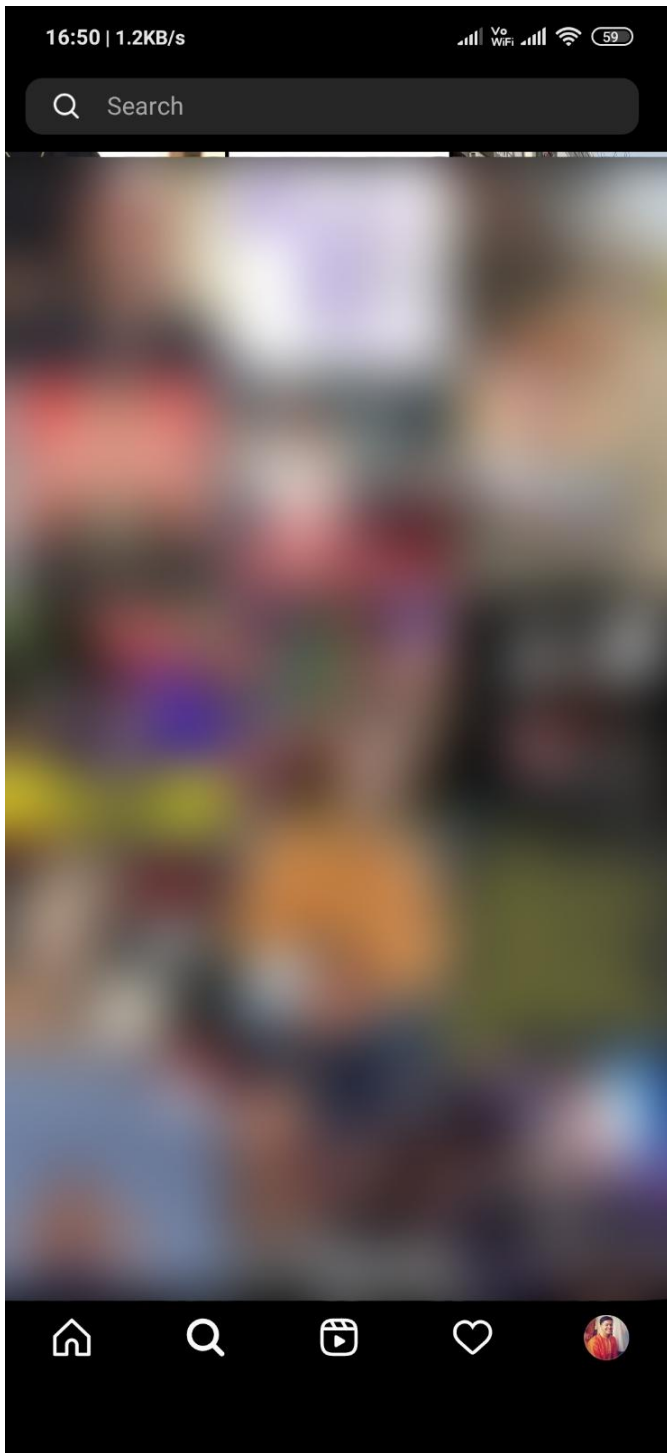


This is the home screen. Here the widgets will be used for :

1. Instagram Logo (SVG File)
2. Icon for Adding Post and Messenger Icon
3. Circle Image avatar for the Stories section
4. Each post is added along with the Avatar of the user, Username and more options Icon
5. The post will have :
  - Like Icon to like the post
  - Comment Icon to comment on the post
  - Send Icon
  - Bookmark Icon
6. The post will have a row of description, no. of the likes it has and the comments section
7. Bottom Navigation bar will consist of :
  - Home Icon to go to home screen
  - Search Icon to go to search screen
  - Reels Icon
  - Like Icon to see who has liked the posts
  - Profile Avatar Icon to go to profile screen

Widgets which will be used here are :

1. Scaffold
2. SingleChildScrollView
3. CircleAvatar
4. SizedBox
5. Row
6. Icon
7. SvgPicture
8. Container
9. Text
10. BottomNavigationBar

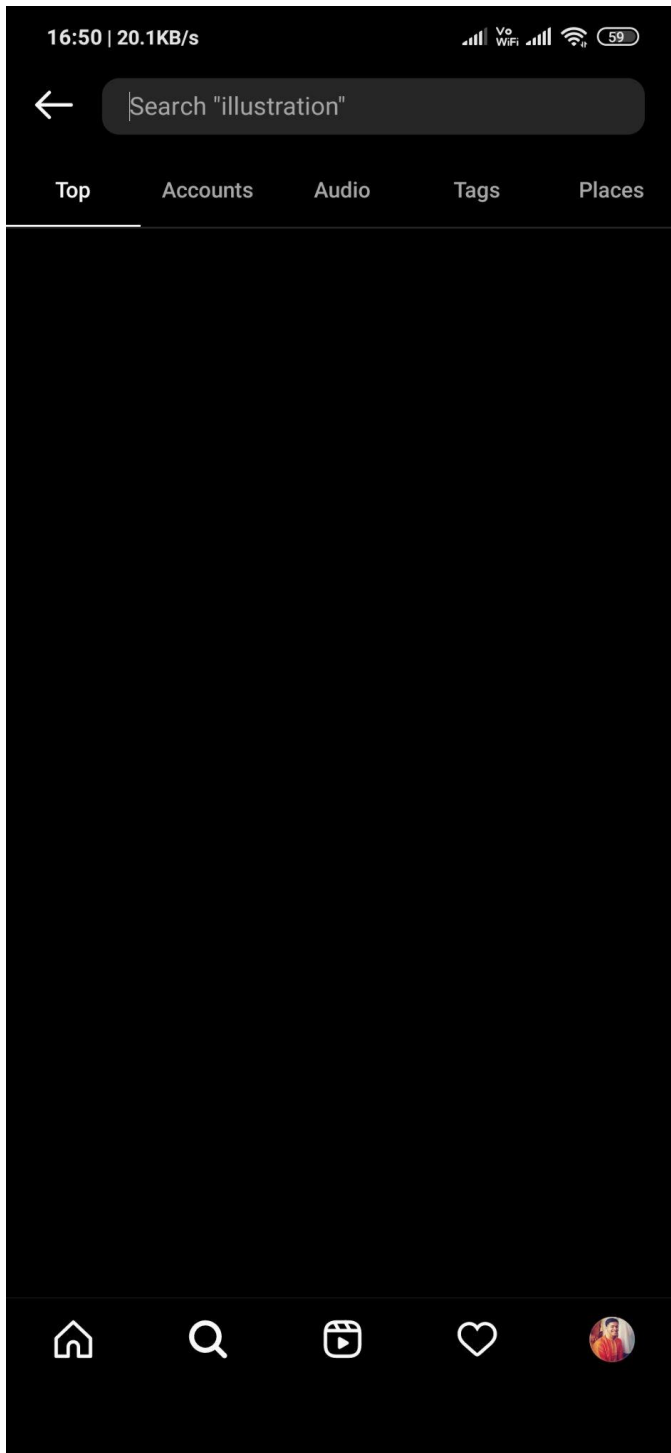
**Search Screen (Posts)**

This is the search screen to view all the posts together.  
Here the widgets will be used for :

1. Search bar with an Search Icon in the top
2. Positioning of the images of the posts on the screen
3. On clicking one of the images, it will redirect to the post which will have :
  - Like Icon to like the post
  - Comment Icon to comment on the post
  - Send Icon
  - Bookmark Icon
4. Then the post will have a row of description, no. of the likes it has and the comments section
5. Bottom Navigation bar will consist of :
  - Home Icon to go to home screen
  - Search Icon to go to search screen
  - Reels Icon
  - Like Icon to see who has liked the posts
  - Profile Avatar Icon to go to profile screen

Widgets which will be used here are :

1. Scaffold
2. SingleChildScrollView
3. Column
4. SizedBox
5. Row
6. Icon
7. SvgPicture
8. Container
9. Text
10. BottomNavigationBar

**Search Screen (Users)**

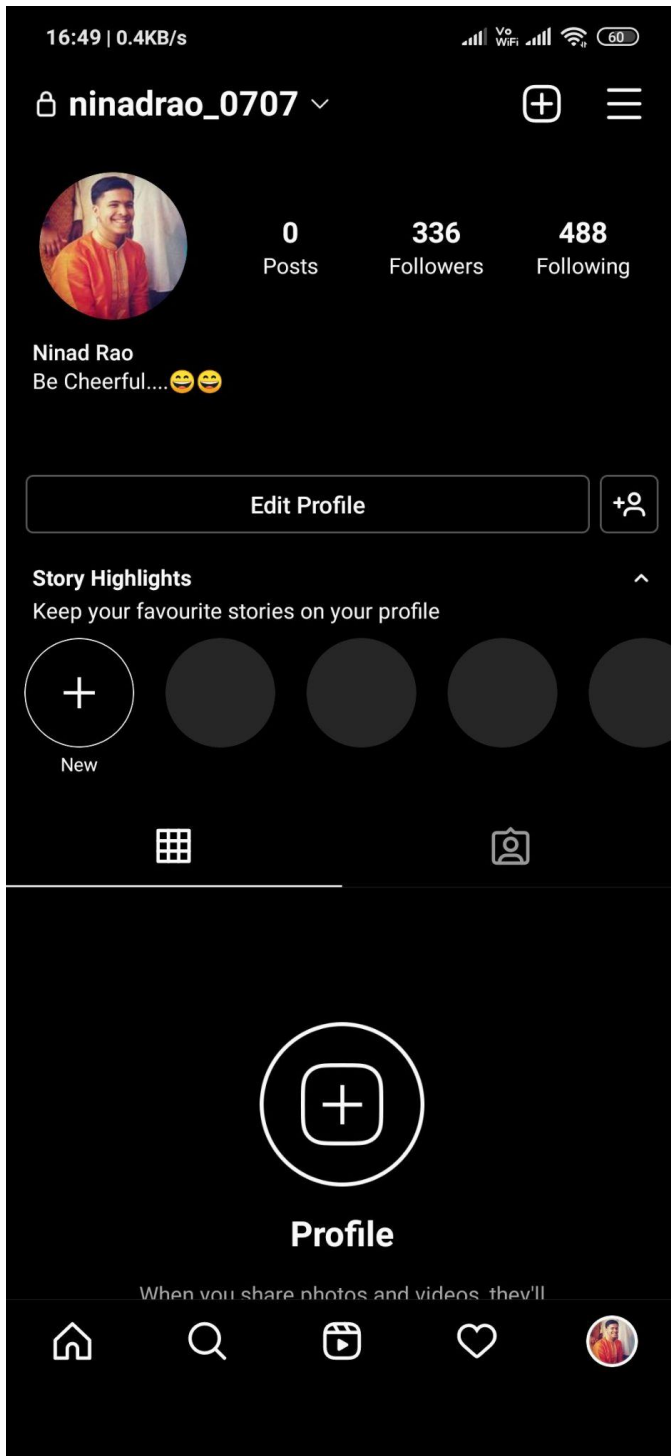
This is the search screen to search for users. Here the widgets will be used for :

1. The search bar will be used to search for users
2. A Left Sided Arrow Icon will show up when clicked on the search bar
3. When searched for a user, it will redirect to the profile screen of the respective user
4. On seeing the profile screen of the user, there will be a button to follow/unfollow the user
5. Bottom Navigation bar will consist of :
  - Home Icon to go to home screen
  - Search Icon to go to search screen
  - Reels Icon
  - Like Icon to see who has liked the posts
  - Profile Avatar Icon to go to profile screen

Widgets which will be used here are :

1. Scaffold
2. InputDecoration
3. Column
4. SizedBox
5. Row
6. Icon
7. Form
8. ListView
9. AppBar
10. BottomNavigationBar

## Profile Screen



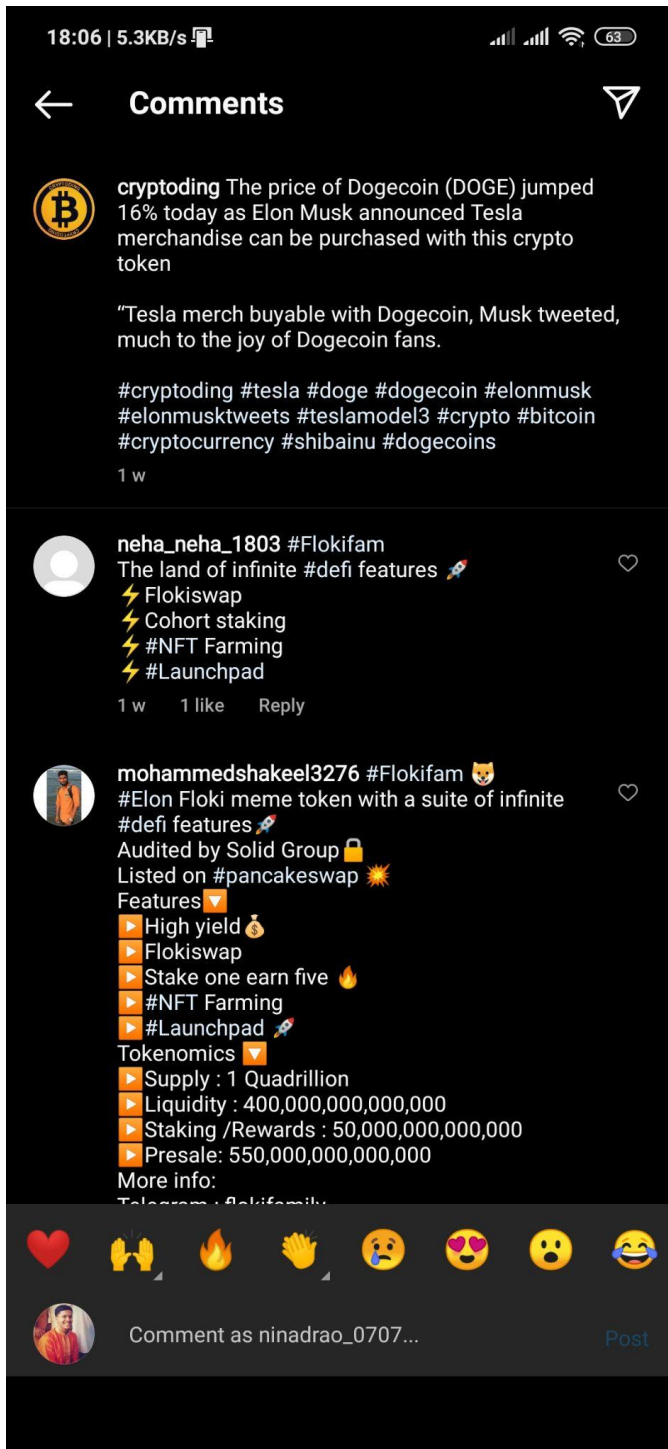
This is the profile screen. Here the widgets will be used for :

1. A Lock Icon and a Downward Arrow Icon
2. Icon for Adding Post and More Options Icon
3. Profile Avatar Image of the user will be there
4. Count of the posts uploaded, followers and following will be there in the same row
5. Another row that will have the full name of the user and another row below it will be the description/bio of the user.
6. Edit Profile button will be there below the user details which will edit the profile details :
  - Profile Picture
  - Full Name
  - Description/Bio
7. Nav Tabs of 2 icons :
  - Post Icon which will have the user's posts
  - Tagged photos Icon
8. If there are no posts, there will be a Icon as shown with Profile and a short description written below it

Widgets which will be used here are :

1. Scaffold
2. InputDecoration
3. Column
4. SizedBox
5. Row
6. Icon
7. Form
8. BottomNavigationBar
9. InkWell

## Comments Screen



This is the comments screen. Here the widgets will be used for :

1. A Left Arrow Icon which will redirect to the home screen
2. A Send Icon on the right
3. Below, there will be 3 columns in which :
  - One column will have the user profile avatar Icon
  - Second column will have the comments along with the description of the post above
  - Third column will have the Like Icon
4. In the bottom, there will be a row of emojis which will be used while entering a comment
5. In the navigation bar, there will be :
  - User Profile avatar Icon
  - Text field to enter the comment
  - Hyperlink to post the comment

Widgets which will be used here are :

1. Scaffold
2. AppBar
3. Column
4. SizedBox
5. Row
6. Icon
7. ListView
8. CircleAvatar
9. Inkwell
10. Expanded

**Conclusion:** Therefore, these are the features and the firebase connections to be made while recreating the 5-7 screens of the app.