### **EXPERIMENT NO: 05**

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**Aim:** To implement navigation, routing, and gestures in a Flutter application

### Theory:

Navigation & Routing in Flutter

Navigation is the process of moving between different screens (or pages) in an app. Since Flutter follows a **widget-based architecture**, each screen is represented as a widget, and navigation is handled using a **stack-based system** (similar to how web browsers manage page history).

Navigation Approaches in Flutter:

## 1. Imperative Navigation (Push-Pop Model)

- Uses Navigator.push() to open a new screen.
- Uses Navigator.pop() to return to the previous screen.
- Works like a stack (Last In, First Out LIFO).

## 2. Declarative Navigation (Named Routes & GoRouter)

- Uses predefined route names to navigate.
- Helps in managing complex app navigation efficiently.

# 3. Navigation with State Management

 Used in large-scale applications where navigation state is maintained using providers like **Provider**, **Riverpod**, **Bloc**, **or GetX**.

## 4. Deep Linking & Dynamic Routing

- Allows external URLs to open specific screens within the app.
- o Useful for handling notifications and web links.

### Routing in Flutter

Routing determines how users navigate through different sections of an application. It enables:

- Defining and managing screens efficiently.
- Enhancing UX by ensuring smooth transitions.

Passing and receiving data between screens.

### Types of Routing:

- Basic Routing: Manually navigating between screens using the Navigator class.
- **Named Routing:** Using a routes map to define screen names and their respective widgets.
- On-Generate Routing: Dynamically controlling navigation flow using conditions.
- Nested Navigation: Managing multiple navigation flows within tabs or bottom navigation bars.

#### Gestures in Flutter

Gestures allow users to interact with the app through touch-based actions, providing a more engaging user experience. Flutter has a powerful **GestureDetector** widget that helps recognize and handle different gestures.

### Common Gesture Types:

- **Tap Gesture**: Used for buttons, links, and UI interactions.
- **Double Tap:** Often used for liking content or zooming.
- Long Press: Triggers additional options or context menus.
- **Swipe & Drag:** Used in carousels, sliders, and scrollable content.
- **Pinch & Zoom:** Common in images and maps.

### Gesture Handling Techniques:

- Using GestureDetector: To detect gestures manually.
- **Using InkWell or InkResponse:** Provides visual feedback for tappable elements.
- **Custom Gesture Recognition:** Flutter allows combining multiple gestures using GestureRecognizer.

Importance of Navigation, Routing, and Gestures in Flutter Apps

- **User-Friendly Experience** Navigation helps users seamlessly explore the app.
- Efficient State Management Proper routing keeps the app organized.
- **Enhanced Interactivity** Gestures make the app feel intuitive and engaging.
- **Optimized Performance** Declarative navigation and lazy loading improve performance.
- **Platform Consistency** Flutter's navigation system works smoothly on Android, iOS, and the web.

### **Code Snippet:**

main.dart

```
import 'package:flutter/material.dart';
import 'package:snapchat clone ui/screens/home screen.dart';
import 'package:snapchat clone ui/screens/initial screen.dart';
import 'package:snapchat clone ui/screens/login screen.dart';
import
'package:snapchat clone ui/screens/signup screen.dart';
void main() {
 runApp(MyApp());
}
class MyApp extends StatelessWidget {
 @override
 Widget build(BuildContext context) {
  return MaterialApp(
  debugShowCheckedModeBanner: false,
   theme: ThemeData(primaryColor: Color(0xFF838486)),
   initialRoute: '/',
   routes: {
    '/': (context) => InitialScreen(),
    '/login screen': (context) => LoginScreen(),
    '/signup screen': (context) => SignupScreen(),
    '/home_screen': (context) => HomeScreen(),
   },
  );
}
}
```

```
Initial Screen.dart
import 'package:flutter/material.dart';
import 'package:snapchat_clone_ui/custom_widgets/custom_widgets.dart';
//Constants
const Color scaffoldColor = Color(0xFFFFFC00);
const Color loginButtonColor = Colors.white;
const Color signupButtonColor = Color(0xFF0EAEFE);
class InitialScreen extends StatefulWidget {
 @override
 InitialScreenState createState() => InitialScreenState();
class InitialScreenState extends State<InitialScreen> {
 @override
 Widget build(BuildContext context) {
  return Scaffold(
   backgroundColor: scaffoldColor,
   body: Stack(
    children:
     Column(
      mainAxisAlignment: MainAxisAlignment.center,
      children: [
        Container(
         height: 180,
         decoration: BoxDecoration(
          image: DecorationImage(
           image: AssetImage("assets/images/icon.png"),
          ),
         ),
       ),
      ],
     ),
     Center(
      child: Padding(
        padding: const EdgeInsets.symmetric(vertical: 30),
        child: Column(
         mainAxisAlignment: MainAxisAlignment.end,
         children: [
          Row(
           mainAxisAlignment: MainAxisAlignment.center,
           children: [
            GestureDetector(
             onTap: () {
```

```
Navigator.pushNamed(context, '/login_screen'); }, child: ReusableButton(
```

```
btnWidth: 130.0,
            btnColour: loginButtonColor,
            btnCircularRadius: 80.0,
            btnChild: Text(
             "Log in",
             style: TextStyle(
              fontSize: 25,
              fontWeight: FontWeight.bold,
              color: Colors.black,
             ),
            ),
           ),
          ),
          SizedBox(width: 15),
          GestureDetector(
          onTap: () {
            Navigator.pushNamed(context, '/signup_screen');
           },
           child:
            ReusableButton(
            btnHeight: 60.0,
            btnWidth: 130.0,
            btnColour: signupButtonColor,
            btnCircularRadius: 80.0,
            btnChild: Text(
             "Sign Up",
             style: TextStyle(
             fontSize: 25,
              fontWeight: FontWeight.bold,
              color: Colors.white,
             ),
            ),
           ),
         ),
        ],
       ),
      ],
     ),
   ),
  ),
),
```

btnHeight: 60.0,

The app opens with a splash screen, then moves to the welcome screen. Clicking "Sign Up" takes the user to the sign-up page, and after registering, they reach the home screen. Here the app will begin. Finally, Home Screen of Snapchat will

Login\_Screen.dart

```
import 'package:flutter/material.dart';
import 'package:font_awesome_flutter/font_awesome_flutter.dart';
import 'package:snapchat_clone_ui/custom_widgets/custom_widgets.dart';
const Falcon hiddenEye = Falcon(FontAwesomelcons.eyeSlash);
const Falcon eye = Falcon(FontAwesomelcons.eye);
class LoginScreen extends StatefulWidget {
 @override
 _LoginScreenState createState() => _LoginScreenState();
}
class _LoginScreenState extends State<LoginScreen> {
 bool _obscureText = true;
 Widget eyeStatus = hiddenEye;
 void _toggle() {
  setState(() {
   _obscureText = !_obscureText;
   if (_obscureText == false) {
   eyeStatus = eye;
   } else {
    eyeStatus = hiddenEye;
 });
 @override
 Widget build(BuildContext context) {
  return Scaffold(
   appBar: AppBar(
    leading: GestureDetector(
     onTap: () {
      Navigator.pop(context);
     child: lcon(lcons.arrow_back_ios, color: Colors.grey),
```

```
),
 elevation: 0,
 backgroundColor: Colors.white,
body: Center(
 child:
  SingleChildScrollView(
  child: Center(
   child: Column(
    mainAxisAlignment: MainAxisAlignment.spaceEvenly,
    children: [
     Text(
      "Log in",
      style: TextStyle(fontSize: 40, color: Colors.black),
     ),
     SizedBox(height: 20),
     CustomSnapTextField(
      label: "USERNAME OR EMAIL",
      isPasswordField: false,
      autoFocus: true,
     ),
     SizedBox(height: 20),
     Column(
      children: [
        Container(
         alignment: Alignment.centerLeft,
         margin: EdgeInsets.symmetric(horizontal:
         50), child: Text(
          "PASSWORD",
          style: TextStyle(
           fontSize: 18,
           fontWeight: FontWeight.bold,
           color: Color(0xFF51B5E5),
          ),
         ),
        ),
        Padding(
         padding: const EdgeInsets.symmetric(horizontal: 50),
         child: TextField(
          obscureText: obscureText,
          autofocus: false,
          cursorHeight: 33,
          cursorWidth: 2,
          decoration: InputDecoration(
```

suffixIcon: GestureDetector(

```
onTap: () {
        _toggle();
       },
       child: eyeStatus,
      floatingLabelBehavior: FloatingLabelBehavior.never,
      contentPadding: EdgeInsets.all(6),
    cursorColor: Color(0xFF69B77D),
   ),
  ),
 ],
SizedBox(height: 60),
//Forgot your password
GestureDetector(
onTap: () {
  //forgot your password
 },
 child: Text(
  "Forgot your password?",
  style: TextStyle(
   fontSize: 17,
   fontWeight: FontWeight.bold,
   color: Color(0xFF51B5E5),
  ),
 ),
),
SizedBox(height: 90),
//Login button
Padding(
 padding: const EdgeInsets.symmetric(horizontal: 80),
 child: GestureDetector(
  onTap: () {
   Navigator.pushNamed(context, '/home_screen');
  },
  child: Container(
   margin: EdgeInsets.only(top: 20),
   child: Text(
    "Log in",
    style: TextStyle(
      fontSize: 25,
      color: Colors.white,
```

```
fontWeight: FontWeight.bold,
             ),
            ),
            alignment: Alignment.center,
            height: 55,
            width: double.infinity,
            decoration: BoxDecoration(
            color: Color(0xFFADB6BD),
             borderRadius: BorderRadius.circular(80),
            ),
           ),
          ),
   ),
   Reels_Screen.dart
import 'package:flutter/material.dart';
import 'package:video_player/video_player.dart';
class ReelScreen extends StatefulWidget {
 const ReelScreen({Key? key}) : super(key: key);
 @override
 State<ReelScreen> createState() => _ReelScreenState();
}
class _ReelScreenState extends State<ReelScreen> {
 final List<String> videoUrls = [
 'assets/videos/video_1.mp4',
 'assets/videos/video_2.mp4',
 ];
 @override
```

Widget build(BuildContext context) {

```
return Scaffold(
   body: PageView.builder(
    scrollDirection: Axis.vertical,
    itemCount: videoUrls.length,
    itemBuilder: (context, index) {
      return ReelVideoPlayer(videoUrl: videoUrls[index]);
    },
   ),
  );
 }
}
class ReelVideoPlayer extends StatefulWidget {
 final String videoUrl;
 const ReelVideoPlayer({Key? key, required this.videoUrl}) : super(key: key);
 @override
 State<ReelVideoPlayer> createState() => _ReelVideoPlayerState();
}
class _ReelVideoPlayerState extends State<ReelVideoPlayer> {
 late VideoPlayerController _controller;
 @override
 void initState() {
  super.initState();
  _controller = VideoPlayerController.network(widget.videoUrl)
   ..initialize().then((_) {
    setState(() {});
    _controller.play();
    _controller.setLooping(true);
   });
 }
 @override
 void dispose() {
  _controller.dispose();
  super.dispose();
 }
 @override
 Widget build(BuildContext context) {
  return Stack(
   alignment: Alignment.bottomCenter,
```

```
children: [
    _controller.value.isInitialized
       ? AspectRatio(
        aspectRatio: controller.value.aspectRatio,
        child: VideoPlayer(_controller),
       )
       : const Center(child: CircularProgressIndicator()),
    Positioned(
      bottom: 20,
      right: 20,
      child: IconButton(
       icon: lcon(
        _controller.value.isPlaying ? lcons.pause : lcons.play_arrow,
        color: Colors.white,
        size: 30,
       ),
       onPressed: () {
        setState(() {
         _controller.value.isPlaying
            ? _controller.pause()
            : _controller.play();
        });
       },
      ),
    ),
   ],
  );
   Chat_Screen.dart
import 'package:flutter/material.dart';
class ChatScreen extends StatefulWidget
 const ChatScreen({Key? key}) : super(key: key);
 @override
 State<ChatScreen> createState() => _ChatScreenState();
}
```

```
class _ChatScreenState extends State<ChatScreen> {
 @override
 Widget build(BuildContext context) {
  return Scaffold(
   backgroundColor: Colors.white,
   body: SafeArea(
    child: Column(
      children: [
      Row(
        mainAxisAlignment: MainAxisAlignment.spaceBetween,
        children: [
         Padding(
          padding: const EdgeInsets.all(8.0),
          child: Row(
           children: [
            CircleAvatar(
              backgroundColor: Colors.transparent,
              backgroundImage: AssetImage("assets/images/hero.png"),
            ),
            SizedBox(width: 10.0),
            CircleAvatar(
             backgroundColor: Colors.grey[100],
              child: lcon(lcons.search, color: Colors.grey[700]),
            ),
           ],
          ),
         ),
         Text(
          "Chat".
          style: TextStyle(fontSize: 20.0, fontWeight: FontWeight.bold),
         ),
         Padding(
          padding: const EdgeInsets.all(8.0),
          child: Row(
           children: [
            CircleAvatar(
              backgroundColor: Colors.grey[100],
              child: lcon(lcons.person add, color: Colors.grey[700]),
            SizedBox(width: 10.0),
            CircleAvatar(
              backgroundColor: Colors.grey[100],
             child: lcon(lcons.more horiz, color: Colors.grey[700]),
            ),
```

```
],
          ),
         ),
        ],
       //list tile for chats here
       SingleChildScrollView(
       child: Column(
         children: [
          ChatTile(
           name: "Team Snapchat",
           image: NetworkImage(
             "https://us-east1-aws.api.snapchat.com/web-
capture/www.snapchat.com/discover/preview/facebook.png",
           ),
           trailing: lcon(
             Icons.chat bubble outline sharp,
            color: Colors.grey[400],
           child: Row(children: [Text("Blocked")]),
          ChatTile(
           name: "Richa",
           image: AssetImage("assets/images/hero 4.png"),
           trailing: lcon(
             lcons.chat_bubble_outline_sharp,
            color: Colors.grey[400],
           child: Row(
             children: [
              Icon(Icons.square, color: Colors.red, size: 15.0),
              SizedBox(width: 5.0),
              Text("New Snap", style: TextStyle(color: Colors.red)),
              SizedBox(width: 5.0),
              Text("."),
              SizedBox(width: 5.0),
              Text("3w"),
            ],
           ),
          ),
          ChatTile(
           name: "Anurag",
           image: AssetImage("assets/images/hero_2.png"),
```

```
trailing: lcon(
  Icons.chat bubble outline sharp,
  color: Colors.grey[400],
 ),
 child: Row(
  children: [
   Icon(Icons.square, color: Colors.purple, size: 15.0),
   SizedBox(width: 5.0),
   Text(
    "New Snap",
    style: TextStyle(color: Colors.purple),
   ),
   SizedBox(width: 5.0),
   Text("."),
   SizedBox(width: 5.0),
   Text("3w"),
  ],
 ),
),
ChatTile(
 name: "Niyati",
 image: AssetImage("assets/images/hero 5.png"),
 trailing: lcon(
  Icons.chat bubble outline sharp,
  color: Colors.grey[400],
 ),
 child: Row(
  children: [
   Icon(Icons.square, color: Colors.red, size: 15.0),
   SizedBox(width: 5.0),
   Text("New Snap", style: TextStyle(color: Colors.red)),
   SizedBox(width: 5.0),
   Text("."),
   SizedBox(width: 5.0),
   Text("3w"),
  ],
 ),
),
ChatTile(
 name: "Ritik",
 image: AssetImage("assets/images/hero_3.png"),
 trailing: lcon(
  Icons.camera alt outlined,
  color: Colors.grey[400],
```

```
),
 child: Row(
  children: [
   Icon(Icons.chat bubble outline outlined, size: 15.0),
   SizedBox(width: 5.0),
   Text("Tap to chat"),
  ],
 ),
),
ChatTile(
 name: "Richa",
 image: AssetImage("assets/images/hero 4.png"),
 trailing: lcon(
  lcons.chat_bubble_outline_sharp,
  color: Colors.grey[400],
 ),
 child: Row(
  children: [
   Icon(Icons.square, color: Colors.red, size: 15.0),
   SizedBox(width: 5.0),
   Text("New Snap", style: TextStyle(color: Colors.red)),
   SizedBox(width: 5.0),
   Text("."),
   SizedBox(width: 5.0),
   Text("3w"),
  ],
 ),
),
ChatTile(
 name: "Anurag",
 image: AssetImage("assets/images/hero_2.png"),
 trailing: lcon(
  Icons.chat bubble outline sharp,
  color: Colors.grey[400],
 ),
 child: Row(
  children: [
   Icon(Icons.square, color: Colors.purple, size: 15.0),
   SizedBox(width: 5.0),
   Text(
     "New Snap",
    style: TextStyle(color: Colors.purple),
   SizedBox(width: 5.0),
```

```
Text("."),
            SizedBox(width: 5.0),
            Text("3w"),
           ],
         ),
        ),
        ChatTile(
          name: "Niyati",
         image: AssetImage("assets/images/hero_5.png"),
         trailing: lcon(
           lcons.camera_alt_outlined,
           color: Colors.grey[400],
          ),
          child:
           Row(
           children:
           [ lcon(
             Icons.send_outlined,
             color:
             Color(0XFF10ACFF), size:
             15.0,
            ),
            SizedBox(width: 5.0),
            Text("Opened"),
            SizedBox(width: 5.0),
            Text("."),
            SizedBox(width: 5.0),
            Text("3w"),
           ],
         ),
        ),
      ),
    ),
   ],
  ),
 floatingActionButton: FloatingActionButton(
  onPressed: () {},
  backgroundColor: Color(0XFF10ACFF),
  child: lcon(lcons.edit note outlined),
 ),
);
```

```
//chatTile widget
class ChatTile extends StatelessWidget {
 final name;
 final image;
 final child;
 final trailing:
 const ChatTile({Key? key, this.image, this.name, this.child, this.trailing})
  : super(key: key);
 @override
 Widget build(BuildContext context) {
  return Column(
   children: [
    Divider(height:
    3), ListTile(
      leading: CircleAvatar(
       radius: 20.0,
       backgroundColor: Colors.transparent,
       backgroundlmage: image,
      ),
     trailing: trailing,
     title: Text(name, style: TextStyle(fontWeight: FontWeight.bold)),
      subtitle: child,
    Divider(height: 3),
   ],
  );
}
   Camera_Screen.dart
import 'package:flutter/material.dart';
import 'package:camera/camera.dart';
class CameraScreen extends StatefulWidget {
 const CameraScreen({Key? key}) : super(key: key);
 @override
 State<CameraScreen> createState() => _CameraScreenState();
}
```

```
class _CameraScreenState extends State<CameraScreen> {
 CameraController? cameraController;
 late List<CameraDescription> cameras;
 bool isCameralnitialized = false;
 @override
 void initState() {
  super.initState();
  _initializeCamera();
 }
 Future<void> _initializeCamera() async {
  cameras = await availableCameras();
  _cameraController = CameraController(cameras[0], ResolutionPreset.high);
  await _cameraController!.initialize();
  if (!mounted) return;
  setState(() => _isCameraInitialized = true);
 }
 @override
 void dispose() {
  _cameraController?.dispose();
  super.dispose();
 }
 @override
 Widget build(BuildContext context) {
  return Scaffold(
   appBar: AppBar(title: const Text("Camera Screen")),
   body:
     isCameralnitialized
        ? CameraPreview( cameraController!)
        : const Center(child: CircularProgressIndicator()),
   floatingActionButton: FloatingActionButton(
   onPressed: () async {
      if (_cameraController != null &&
        cameraController!.value.isInitialized) {
      final image = await cameraController!.takePicture();
       ScaffoldMessenger.of(context).showSnackBar(
       SnackBar(content: Text("Picture saved at: ${image.path}")),
      );
    },
```

```
child: const lcon(lcons.camera),
    ),
    );
}
```

• Home\_Screen.dart

```
import 'package:flutter/material.dart';
import 'package:snapchat_clone_ui/screens/camera_screen.dart';
import 'package:snapchat_clone_ui/screens/chat_screen.dart';
import 'package:snapchat_clone_ui/screens/location_screen.dart';
import 'package:snapchat clone ui/screens/reels screen.dart';
import 'package:snapchat clone ui/screens/stories screen.dart';
import 'initial_screen.dart';
class HomeScreen extends StatefulWidget {
 @override
 State<HomeScreen> createState() => HomeScreenState();
}
class _HomeScreenState extends State<HomeScreen> {
 int selectedIndex = 0;
 static const List<Widget> widgetOptions = <Widget>[
  LocationScreen(),
  ChatScreen(),
  CameraScreen(),
  StoriesScreen(),
  ReelScreen(),
 ];
 void _onltemTapped(int index) {
  setState(() {
   selectedIndex = index;
  });
 }
 @override
 Widget build(BuildContext context) {
  return Scaffold(
```

```
backgroundColor: Colors.white,
body: SafeArea(child: widgetOptions[_selectedIndex]),
bottomNavigationBar: BottomNavigationBar(
 items: <BottomNavigationBarltem>[
  BottomNavigationBarltem(
  backgroundColor: Colors.black,
  icon: lcon(
    Icons.location_on_outlined,
    size: 25.0,
    color: Colors.white,
   ),
   label: "",
  ),
  BottomNavigationBarltem(
   backgroundColor: Colors.black,
   icon: lcon(
    Icons.chat bubble outline rounded,
    size: 25.0,
    color: Colors.white,
   ),
   label: "",
  ),
  BottomNavigationBarltem(
   backgroundColor: Colors.black,
   icon: lcon(
   Icons.camera alt outlined,
   size: 25.0,
    color: Colors.white,
   ),
   label: "",
  ),
  BottomNavigationBarltem(
   backgroundColor: Colors.black,
   icon: lcon(
   Icons.group outlined,
    size: 25.0,
    color: Color(0XFF10ACFF),
   ),
   label: "",
  ),
  BottomNavigationBarltem(
   backgroundColor: Colors.black,
   icon: lcon(
   Icons.play arrow outlined,
```

```
size: 25.0,
        color: Colors.white,
      ),
      label: "",
     ),
    1,
    type: BottomNavigationBarType.fixed,
    currentIndex: _selectedIndex,
    selectedItemColor: Color(0XFF10ACFF),
    backgroundColor: Colors.black,
    onTap: _onItemTapped,
    unselectedItemColor: Colors.white,
   ),
  );
   Sign_Up page.dart
import 'package:flutter/material.dart';
import 'package:snapchat_clone_ui/custom_widgets/custom_widgets.dart';
class SignupScreen extends StatefulWidget {
 @override
 _SignupScreenState createState() => _SignupScreenState();
}
class _SignupScreenState extends State<SignupScreen> {
 @override
 Widget build(BuildContext context) {
  return Scaffold(
   appBar: AppBar(
    leading: GestureDetector(
      onTap: () {
       Navigator.pop(context);
     child: lcon(lcons.arrow_back_ios, color: Colors.grey),
    ),
    elevation: 0,
    backgroundColor: Colors.white,
   body: Center(
```

```
SingleChildScrollView(
      child: Center(
       child: Column(
        mainAxisAlignment: MainAxisAlignment.spaceEvenly,
        children: [
         Text(
          "What's your name?",
          style: TextStyle(fontSize: 32, color: Colors.black),
         ),
         SizedBox(height: 20),
         CustomSnapTextField(
         label: "FIRST NAME",
          isPasswordField: false,
          autoFocus: true,
         ),
         SizedBox(height: 20),
         CustomSnapTextField(
         label: "LAST NAME",
          isPasswordField: false,
          autoFocus: true,
         ),
         SizedBox(height: 20),
         Padding(
          padding: const EdgeInsets.symmetric(horizontal: 55),
          child: RichText(
           text: TextSpan(
            text:
               "By tapping Sign up & Accept, you acknowledge that you have
                                            style: TextStyle(color:
read the ".
                                            Color(0xFFB3B7B8), fontSize:
                                            17), children: <TextSpan>[
                                             TextSpan(
                                              text: 'Privacy Policy ',
                                              style: TextStyle(color:
                                              Color(0xFF51B5E5)),
                                             ),
                                             TextSpan(
                                              text: 'and agree to the ',
                                              style: TextStyle(color:
                                              Color(0xFFB3B7B8)),
                                             ),
                                             TextSpan(
```

child:

```
text: 'Terms of service.',
style: TextStyle(color:
Color(0xFF51B5E5)),
),
```

```
),
  ),
 SizedBox(height: 90),
 //Signup button
 Padding(
  padding: const EdgeInsets.symmetric(horizontal: 80),
  child: GestureDetector(
   onTap: () {
     Navigator.pushNamed(context, '/home_screen');
   },
   child: Container(
     margin: EdgeInsets.only(top: 20),
     child: Text(
      "Sign up & Accept",
      style: TextStyle(
      fontSize: 25,
       color: Colors.white,
       fontWeight: FontWeight.bold,
      ),
     ),
     alignment: Alignment.center,
     height: 55,
     width: double.infinity,
     decoration: BoxDecoration(
     color: Color(0xFFADB6BD),
      borderRadius: BorderRadius.circular(80),
     ),
   ),
  ),
],
```

],

### • Stories\_Screen.dart

```
import 'package:flutter/material.dart';
class StoriesScreen extends StatefulWidget {
 const StoriesScreen({Key? key}) : super(key: key);
 @override
 State<StoriesScreen> createState() => StoriesScreenState();
}
class _StoriesScreenState extends State<StoriesScreen> {
 @override
 Widget build(BuildContext context) {
  return Scaffold(
   body: SafeArea(
    child:
      SingleChildScrollView(
     child: Column(
      children: [
        Row(
         mainAxisAlignment: MainAxisAlignment.spaceBetween,
         children: [
          Padding(
           padding: const EdgeInsets.all(8.0),
           child: Row(
            children: [
             CircleAvatar
               backgroundColor: Colors.transparent,
               backgroundImage: AssetImage("assets/images/hero.png"),
             ),
             SizedBox(width: 10.0),
             CircleAvatar(
               backgroundColor: Colors.grey[100],
               child: lcon(lcons.search, color: Colors.grey[700]),
             ),
            ],
           ),
          ),
          Text(
           "Stories",
```

style: TextStyle( fontSize: 20.0,

```
fontWeight: FontWeight.bold,
   ),
  ),
  Padding(
   padding: const EdgeInsets.all(8.0),
   child: Row(
     children: [
      CircleAvatar
       backgroundColor: Colors.grey[100],
       child: lcon(
        Icons.person add,
        color: Colors.grey[700],
       ),
      ),
      SizedBox(width: 10.0),
      CircleAvatar(
       backgroundColor: Colors.grey[100],
       child: lcon(
        Icons.more horiz,
        color: Colors.grey[700],
       ),
     ),
    ],
   ),
  ),
 ],
SizedBox(height: 30.0),
//Friends section
Container(
 padding: EdgeInsets.symmetric(horizontal: 20.0),
 child: Column(
  children: [
   Container(
    alignment: Alignment.topLeft,
     child: Text(
      "Friends",
      style: TextStyle(
      fontSize: 18.0,
       fontWeight: FontWeight.bold,
     ),
    ),
```

```
Container(
    height: 140,
    child: ListView(
     scrollDirection: Axis.horizontal,
     children: [
       Row(
        children:
         storyBubble(
          name: "Anurag",
          image: AssetImage("assets/images/hero_2.png"),
         SizedBox(width: 15.0),
         storyBubble(
          name: "Richa",
          image: AssetImage("assets/images/hero 4.png"),
         ),
         SizedBox(width: 15.0),
         storyBubble(
          name: "Niyati",
          image: AssetImage("assets/images/hero_5.png"),
         ),
         SizedBox(width: 15.0),
         storyBubble(
          name: "Ritik",
          image: AssetImage("assets/images/hero_3.png"),
         ),
         SizedBox(width: 15.0),
         storyBubble(
          name: "Niyati",
          image: AssetImage("assets/images/hero 5.png"),
         ),
        ],
      ),
  ],
//Subscriptions section
Container(
```

SizedBox(height: 20.0),

padding: EdgeInsets.symmetric(horizontal: 20.0),

```
children: [
          Container(
             alignment: Alignment.topLeft,
             child: Row(
              children:
               [ Text(
                "Subscriptions"
                           style:
                TextStyle(
                fontSize: 17.0,
                 fontWeight: FontWeight.bold,
                ),
               ),
               SizedBox(width: 5.0),
               lcon(lcons.arrow_forward_ios, size: 15.0),
              ],
             ),
            SizedBox(height: 20.0),
            Container(
             height: 200.0,
             child: ListView(
              scrollDirection: Axis.horizontal,
              children: [
               Row(
                children:
                 subscriptionTile(
                  name: "Kundu",
                  image: Image.network(
                    "https://c4.wallpaperflare.com/wallpaper/923/727/796/anime-
digital-art-artwork-2d-portrait-display-hd-wallpaper-preview.jpg",
                    height: 200.0,
                  ),
                  SizedBox(width: 10.0),
                 subscriptionTile(
                 name: "Tumami",
                  image: Image.network(
                    "https://images.pexels.com/photos/9410606/pexels-photo-
9410606.jpeg?cs=srgb&dl=pexels-zetong-li-9410606.jpg&fm=jpg",
                    height: 200.0,
                  ),
```

child: Column(

), SizedBox(width: 10.0),

```
subscriptionTile(
                  name: "Jan Goldz",
                  image: Image.network(
                    "https://c0.wallpaperflare.com/preview/303/473/216/man-
standing-on-mountain-during-sunset.jpg",
                   height: 200.0,
                  ),
                 ),
                 SizedBox(width: 10.0),
                 subscriptionTile(
                 name: "Bastrop",
                  image: Image.network(
                    "https://c4.wallpaperflare.com/wallpaper/367/257/149/anime-
anime-girls-digital-art-artwork-2d-hd-wallpaper-preview.jpg",
                    height: 200.0,
                  ),
                 ),
                 SizedBox(width: 10.0),
                 subscriptionTile(
                 name: "Mulessa",
                  image: Image.network(
                    "https://wallpapercave.com/wp/wp2722942.jpg",
                   height: 200.0,
                  ),
                 ),
                ],
               ),
          ],
        //Discover Section
        Container(
         padding: EdgeInsets.symmetric(horizontal: 20.0, vertical: 20.0),
         child: Column(
          children: [
           Container(
            alignment: Alignment.topLeft,
             child: Text(
              "Discover",
              style: TextStyle(
```

```
fontSize: 17.0,
               fontWeight: FontWeight.bold,
              ),
             ),
            ),
            ListView(
             shrinkWrap: true,
             children: [
             Column(
               children: [
                Row(
                children: [
                   Expanded(
                    flex: 2,
                    child: DiscoverTile(
                     name: "Weird Mud Games",
                     image: Image.network(
"https://c4.wallpaperflare.com/wallpaper/367/257/149/anime-anime-girls-digital-
art-artwork-2d-hd-wallpaper-preview.jpg",
                      height: 380,
                     ),
                    ),
                   ),
                   SizedBox(width: 8.0),
                   Expanded(
                    flex: 2,
                    child: DiscoverTile(
                     name: "Mulessa",
                     image: Image.network(
                      "https://wallpaperaccess.com/full/1559254.png"
                      , height: 380.0,
                     ),
                    ),
                   ),
                  ],
                ),
               ],
              ),
              SizedBox(height: 0.0),
              Column(
               children: [
                Row(
                children: [
```

```
Expanded(
                    flex: 2,
                    child: DiscoverTile(
                     name: "Weird Mud Games",
                     image: Image.network(
"https://c4.wallpaperflare.com/wallpaper/367/257/149/anime-anime-girls-digital-
art-artwork-2d-hd-wallpaper-preview.jpg",
                      height: 380,
                     ),
                   ),
                  ),
                  SizedBox(width: 8.0),
                  Expanded(
                    flex: 2,
                    child: DiscoverTile(
                     name: "Mulessa",
                     image: Image.network(
                      "https://wallpaperaccess.com/full/1559254.png"
                      , height: 380.0,
                     ),
                   ),
                  ),
         ),
      ],
    ),
class subscriptionTile extends StatelessWidget {
 final name;
 final image;
 const subscriptionTile({Key? key, this.name, this.image}) : super(key: key);
```

```
@override
 Widget build(BuildContext context) {
  return Column(
   children: [
    Stack(
    children: [
       image,
       Positioned(
       bottom: 2,
       child: Padding(
         padding: const EdgeInsets.symmetric(
          horizontal: 8.0,
          vertical: 2.0,
         ),
         child: Text(
          name,
          style: TextStyle(
           color: Colors.white,
           fontWeight: FontWeight.bold,
          ),
         ),
      ),
    ),
   ],
 );
class DiscoverTile extends StatelessWidget {
 final name;
 final image;
 const DiscoverTile({Key? key, this.name, this.image}) : super(key: key);
 @override
 Widget build(BuildContext context) {
  return Column(
   children: [
    Stack(
    children: [
       image,
       Positioned(
```

```
bottom: 30,
        child: Padding(
         padding: const EdgeInsets.symmetric(
          horizontal: 8.0,
          vertical: 2.0,
         ),
         child: Text(
          name,
          style: TextStyle(
           color: Colors.white,
           fontWeight: FontWeight.bold,
           fontSize: 20.0,
          ),
         ),
        ),
      ),
    ),
   ],
  );
}
class storyBubble extends StatelessWidget {
 final name;
 final image;
 const storyBubble({Key? key, this.image, this.name}) : super(key: key);
 @override
 Widget build(BuildContext context) {
  return Column(
   children: [
    CircleAvatar(
    radius: 45.0,
      backgroundColor: Colors.purple,
     child: CircleAvatar(
       radius: 43.0,
       backgroundColor: Colors.white,
      child: CircleAvatar(backgroundImage: image, radius: 40.0),
     ),
    ),
    SizedBox(height: 10.0),
    Text(name, style: TextStyle(fontWeight: FontWeight.w500)),
   ],
```

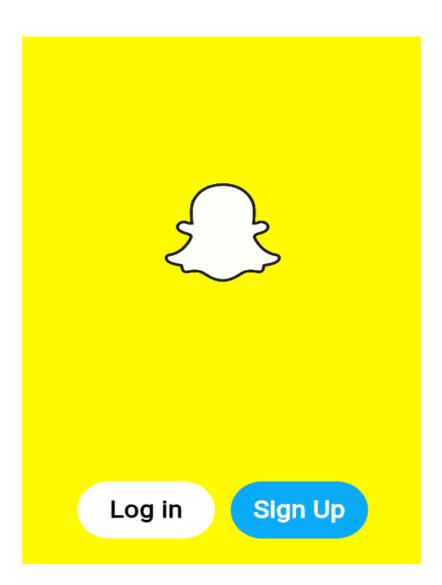
```
);
}
}
```

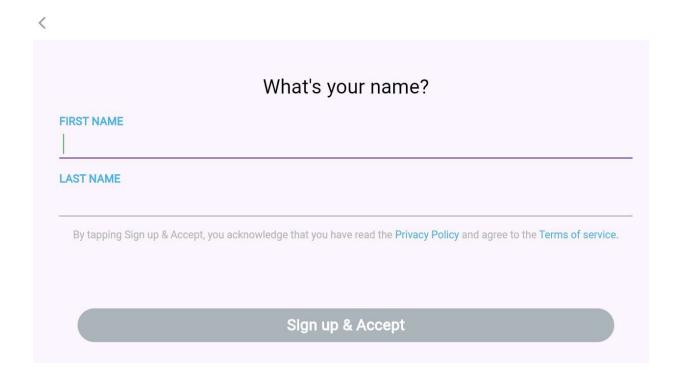
Location\_Screen.dart

```
import 'package:flutter/material.dart';
import 'package:google_maps_flutter/google_maps_flutter.dart';
import 'package:geolocator/geolocator.dart';
import 'package:permission_handler/permission_handler.dart';
class LocationScreen extends StatefulWidget {
 const LocationScreen({Key? key}) : super(key: key);
 @override
 State<LocationScreen> createState() => _LocationScreenState();
}
class _LocationScreenState extends State<LocationScreen> {
 GoogleMapController? _mapController;
 LatLng _currentPosition = const LatLng(37.7749, -122.4194); // Default to SF
 Set<Marker> _markers = {};
 @override
 void initState() {
  super.initState();
  _getCurrentLocation();
 }
 Future<void> _getCurrentLocation() async {
  var status = await Permission.location.request();
  if (status.isGranted) {
   Position position = await Geolocator.getCurrentPosition(
    desiredAccuracy: LocationAccuracy.high,
   );
   setState(() {
    _currentPosition = LatLng(position.latitude, position.longitude);
    _markers.add(
      Marker(
       markerId: const MarkerId("currentLocation"),
       position: _currentPosition,
```

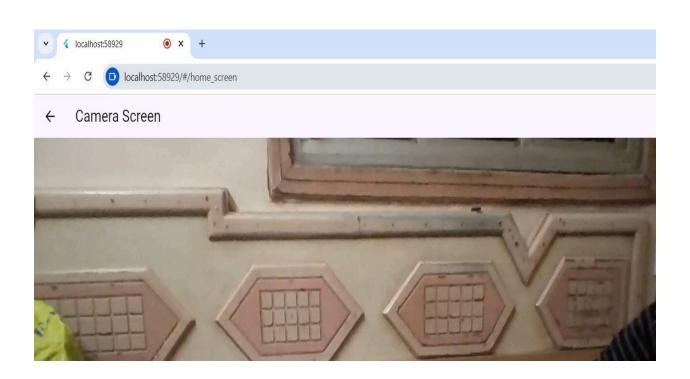
```
infoWindow: const InfoWindow(title: "You"),
     ),
    );
   });
_mapController?.animateCamera(CameraUpdate.newLatLng(_currentPosition));
  }
 }
 @override
 Widget build(BuildContext context) {
  return Scaffold(
   body: GoogleMap(
    initialCameraPosition:
    CameraPosition( target:
    _currentPosition,
     zoom: 14,
    ),
    myLocationEnabled: true,
    myLocationButtonEnabled: true,
    markers: _markers,
    onMapCreated: (controller) {
     _mapController = controller;
    },
   ),
 );
```

## Screenshot:









## Reels\_Screen:



# Stories\_Page:

