MAD and PWA Lab

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Experiment No.-2

AIM: To design Flutter UI by including common widgets.

THEORY:

1. **SplashScreen (splashscreen.dart):**

Description:This widget represents the splash screen of the application, displaying an animated logo (Olx) and a loading animation.

Widgets Used:
- **AnimatedTextKit:** Provides a set of pre-built animated text styles.
- **ColorizeAnimatedText:** A specific type of animated text that changes color dynamically.
- **Scaffold:** The top-level container for the widget hierarchy.

2. **HomeScreen (home_screen.dart):**
Description:The main screen of the application where users can search for items and view banners and categories.

 Widgets Used:
Scaffold: The top-level container for the widget hierarchy.
AppBar: The app bar containing the location information and search bar.
TextField: Allows users to input search queries.
BannerWidget: A custom widget for displaying banners and categories.
bottomNavigationBar: Contains a sign-out button.

BannerWidget (banner_widget.dart):

Description: A custom widget representing a banner section with information about cars, animated text, and buttons for buying and selling.

Widgets Used:
- **Neumorphic:** A container with neumorphic (soft shadow) styling.
- **Container:** A box to hold other widgets with specified dimensions.
- **Padding:** Adds padding around its child widgets.
- **Column:** Arranges its children in a vertical column.
- **Row:** Arranges its children in a horizontal row.
- **Text:** Displays text with specified styling.
- **SizedBox:** Provides a box with a fixed size.
- **DefaultTextStyle:** Applies a default text style to its child.
- **AnimatedTextKit:** Displays a set of animated texts.
- **FadeAnimatedText:** A specific type of animated text with a fading effect.
- **NeumorphicButton :**A neuromorphic-styled button.

CODE:

splashscreen.dart:

```dart
import 'package:animated_text_kit/animated_text_kit.dart';
import 'package:flutter/material.dart';

class SplashScreen extends StatelessWidget {
 const SplashScreen({super.key});

 @override
 Widget build(BuildContext context) {
  const colorizeColors = [
    Colors.white,
    Colors.cyan,

  ];

  const colorizeTextStyle = TextStyle(
```

```dart
            fontSize: 50.0,
            fontFamily: 'Horizon',//need to add our own font
            fontWeight: FontWeight.bold,
        );
        return  Scaffold(
          backgroundColor:Colors.cyan.shade900 ,
          body:Center(
            child: Column(
              mainAxisSize: MainAxisSize.min,
              children: [
               Image.asset('assets/images/cart.png',
                  // color: Colors.white
                 ),
               SizedBox(
                 height:10,
               ),
                //need an animated text
             AnimatedTextKit(
                animatedTexts: [
                 ColorizeAnimatedText(
                   'Olx',
                   textStyle: colorizeTextStyle,
                   colors: colorizeColors,
                  ),

                ],
                isRepeatingAnimation: true,
                onTap: () {
                 print("Tap Event");
                },
              ),

              ],
            ),
          ),

        );
    }
}
```

home_screen.dart:

```dart
import 'package:firebase_auth/firebase_auth.dart';
import 'package:flutter/cupertino.dart';
import 'package:flutter/material.dart';
import 'package:location/location.dart';
import 'package:flutter_geocoder/geocoder.dart';
import 'package:olx_clone/screens/login_screen.dart';
import 'package:olx_clone/widgets/banner_widget.dart';

class HomeScreen extends StatefulWidget {
  static const String id = 'home-screen';
  final LocationData? locationData;

  HomeScreen({required this.locationData});

  @override
  State<HomeScreen> createState() => _HomeScreenState();
}

class _HomeScreenState extends State<HomeScreen> {
  String address = 'India';

  Future<String?> getAddress() async {
    // From coordinates
    final coordinates = Coordinates(widget.locationData?.latitude,
widget.locationData?.longitude);
    var addresses = await Geocoder.local.findAddressesFromCoordinates(coordinates);
    var first = addresses.first;
    setState(() {
      address = first.addressLine ?? 'Address not found';
    });
    return first.addressLine;
  }

  @override
  void initState() {
    super.initState();

    getAddress();
  }

  @override
```

```dart
Widget build(BuildContext context) {
  return Scaffold(

    appBar: AppBar(
      backgroundColor: Colors.white,
      elevation: 0.0,
      automaticallyImplyLeading: false,
      title: InkWell(
        onTap: () {},
        child: Container(
          width: MediaQuery.of(context).size.width,
          child: Padding(
            padding: const EdgeInsets.only(top: 8, bottom: 8),
            child: Row(
              children: [
                Icon(CupertinoIcons.location_solid, color: Colors.black, size: 18,),
                Flexible(
                  child: Text(
                    address,
                    style: TextStyle(color: Colors.black, fontSize: 12, fontWeight:
FontWeight.bold),
                  ),
                ),
                Icon(Icons.arrow_downward_outlined, color: Colors.black, size: 18,),
              ],
            ),
          ),
        ),
      ),
    ),
    body: Column(
      children: [
        Container(
          color: Colors.white,
          child: Padding(
            padding: const EdgeInsets.fromLTRB(12,0,12,8),
            child: Row(
              children: [
                Expanded(
                  child: SizedBox(
                    height: 40,
```

```dart
              child: TextField(
                decoration: InputDecoration(
                  prefixIcon: Icon(Icons.search, color: Colors.grey,),
                  labelText: 'Find Cars, Mobiles and many more',
                  labelStyle: TextStyle(fontSize: 12),
                  contentPadding: EdgeInsets.only(left: 10, right: 10),
                  border: OutlineInputBorder(
                    borderRadius: BorderRadius.circular(6),
                  ),
                ),
              ),
            ),
          ),
          SizedBox(width: 10,),
          Icon(Icons.notifications_none),
          SizedBox(width: 10,),
        ],
      ),
    ),
  ),
  Padding(
    padding: const EdgeInsets.fromLTRB(12, 0, 12, 8),
    child: Column(
      children: [
        //Banner
        BannerWidget(),
        //categories

      ],
    ),
  ),
      ],
    ),
  );
}
}
```

banner_widget.dart:
```dart
import 'package:animated_text_kit/animated_text_kit.dart';
import 'package:flutter/material.dart';
import 'package:flutter_neumorphic_plus/flutter_neumorphic.dart';
```

```dart
class BannerWidget extends StatelessWidget {
 @override
 Widget build(BuildContext context) {
  return Neumorphic(
    child: Container(
     width: MediaQuery.of(context).size.width,
     height: MediaQuery.of(context).size.height * 0.25,
     color: Colors.cyan.shade800,
     child: Padding(
       padding: const EdgeInsets.all(10.0),
       child: Column(

        mainAxisAlignment: MainAxisAlignment.spaceBetween,
         children: [
          Padding(
            padding: const EdgeInsets.all(10.0),
            child: Row(
             mainAxisAlignment: MainAxisAlignment.spaceBetween,
             children: [
              Column(
                crossAxisAlignment: CrossAxisAlignment.start,
                children: [
                 SizedBox(height: 10),
                 Text(
                  'CARS',
                  style: TextStyle(
                    fontWeight: FontWeight.bold,
                    color: Colors.white,
                    letterSpacing: 1,
                    fontSize: 18,
                  ),
                 ),
                 SizedBox(height: 20),
                 SizedBox(
                  width: 200.0, // Adjust the width as needed
                  child: DefaultTextStyle(
                    style: const TextStyle(
                     fontSize: 15.0,
                     fontWeight: FontWeight.bold,
                    ),
```

```dart
        child: AnimatedTextKit(
          repeatForever: true,
          isRepeatingAnimation: true,
          animatedTexts: [
            FadeAnimatedText(
              'Reach 10 Lakh+\nInterested Buyers',
              duration: Duration(seconds: 4),
            ),
            FadeAnimatedText(
              'New way to\nBuy or Sell Cars',
              duration: Duration(seconds: 4),
            ),
            FadeAnimatedText(
              'Over 1 Lakh\nCars to Buy',
              duration: Duration(seconds: 4),
            ),
          ],
        ),
      ),
    ),
  ],
),
Neumorphic(
  style: NeumorphicStyle(
    color: Colors.white,
  ),
  child: Image.network(

'https://firebasestorage.googleapis.com/v0/b/olxclone-12618.appspot.com/o/banner%2Ficons8-car-100.png?alt=media&token=8e6abf20-34d5-4d51-93c5-48cbf675924b',
    width: 95, // Adjust the width as needed
    height: 95, // Adjust the height as needed
  ),
),
        ],
      ),
    ),

Row(
  mainAxisSize: MainAxisSize.min,
  children: [
```

```dart
          Expanded(child: NeumorphicButton(
            onPressed: (){},
            style: NeumorphicStyle(color: Colors.white),
            child: Text('Buy Car',textAlign: TextAlign.center,),
          ),),
          SizedBox(width:20,),
          Expanded(child: NeumorphicButton(
            onPressed: (){},
            style: NeumorphicStyle(color: Colors.white),
            child: Text('Sell Car',textAlign: TextAlign.center,),
          ),),
        ],
      )
    ],
   ),
  ),
  ),
 );
}
}
```

main.dart:
```dart
import 'package:firebase_core/firebase_core.dart';
import 'package:flutter/material.dart';
import 'package:olx_clone/screens/authentication/email_auth_screen.dart';
import 'package:olx_clone/screens/authentication/phoneauth_screen.dart';
import 'package:olx_clone/screens/home_screen.dart';
import 'package:olx_clone/screens/login_screen.dart';
import 'package:olx_clone/screens/splash_screen.dart';
import 'package:olx_clone/screens/location_screen.dart';
import 'dart:io';


void main() async {
 WidgetsFlutterBinding.ensureInitialized();
 Platform.isAndroid ?await Firebase.initializeApp(
   options: const FirebaseOptions(
     apiKey: "AIzaSyDuFtAm59795zlrpp16kTJTbd1Lac95KkI",
     appId: "1:232516563209:android:d2dea587c60de17bac63d8",
```

```dart
      messagingSenderId:"232516563209" ,
      projectId: "olxclone-12618"
   )
):await Firebase.initializeApp();
 runApp(MyApp());
}

class MyApp extends StatelessWidget {
 @override
 Widget build(BuildContext context) {
  return MaterialApp(
    debugShowCheckedModeBanner: false,
     theme: ThemeData(
       primaryColor: Colors.cyan.shade900,
       fontFamily: 'Horizon',
     ),
    initialRoute: SplashScreen.id,
    routes: {
     SplashScreen.id: (context) => SplashScreen(),
     LoginScreen.id: (context) => LoginScreen(),
     PhoneAuthScreen.id: (context) => PhoneAuthScreen(),
     LocationScreen.id: (context) => LocationScreen(),
     HomeScreen.id: (context) => HomeScreen(locationData: null),
     EmailAuthScreen.id: (context) => EmailAuthScreen(),
    },

  );
```

pubsec.yaml:
```yaml
name: olx_clone
description: "A new Flutter project."

publish_to: 'none' # Remove this line if you wish to publish to pub.dev

version: 1.0.0+1

environment:
 sdk: '>=3.2.5 <4.0.0'

dependencies:
 flutter:
```

```yaml
    sdk: flutter


  cupertino_icons: ^1.0.2
  cloud_firestore: ^4.15.3
  animated_text_kit: ^4.2.2
  flutter_signin_button: ^2.0.0
  firebase_core: ^2.24.2
  firebase_auth: ^4.16.0
  legacy_progress_dialog: ^0.1.2
  location: ^5.0.3
  flutter_geocoder: ^0.2.2-nullsafety
  google_sign_in: ^6.2.1
  email_validator: ^2.1.17
  flutter_neumorphic_plus: ^3.3.0

dev_dependencies:
 flutter_test:
   sdk: flutter

 flutter_lints: ^2.0.0

flutter:

 uses-material-design: true

 assets:
   - assets/images/cart.png
   - assets/images/map.png
```
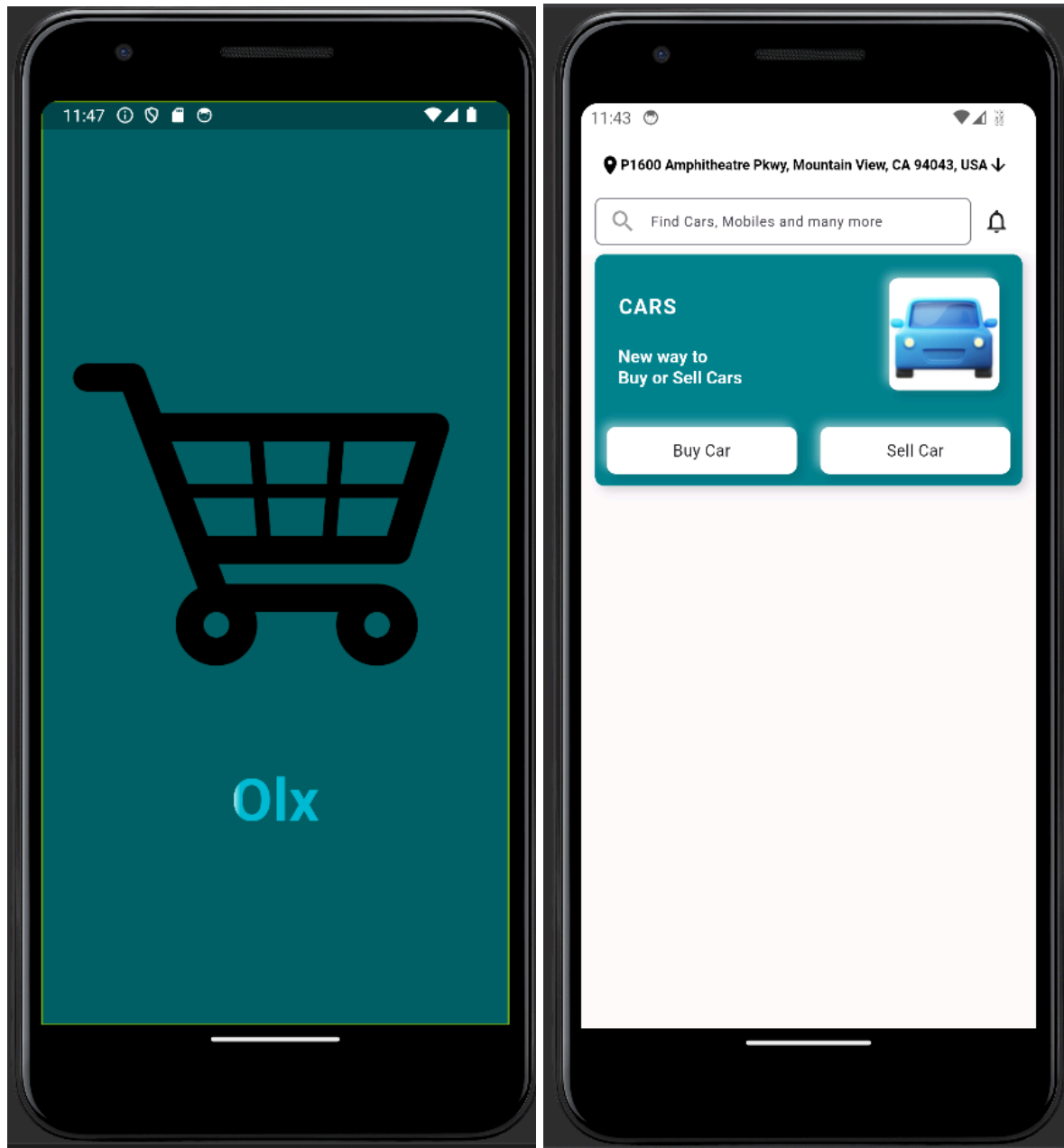
OUTPUT:

CONCLUSION:
We have designed the FlutterUi using the common widgets.