

MPL EXP-2

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D15A - 47

Aim: To Design Flutter UI by including common widgets

Theory:

Common Widgets used in Flutter app:

1. **Scaffold:** Provides the basic visual structure for a screen, including app bars, bodies, and bottom navigation.
2. **AppBar:** A widget that is displayed at the top of the screen.
3. **Text:** Displays an immutable piece of text.
4. **TextField:** Allows the user to enter text.
5. **Image.network:** Displays an image from a URL.
6. **SizedBox:** A box with a specified size.
7. **ListView.builder:** Creates a scrollable list of widgets that are built on demand.
8. **Card:** A panel with slightly rounded corners and a shadow.
9. **InkWell:** A rectangular area of a UI that responds to touch.
10. **Column:** Arranges its children in a vertical array.
11. **Row:** Arranges its children in a horizontal array.
12. **Padding:** Inserts space around another widget.
13. **Align:** Aligns its child within itself.
14. **Container:** A widget that combines common painting, positioning, and sizing widgets.
15. **CircularProgressIndicator:** A widget that indicates that a task is in progress.
16. **BottomNavigationBar:** A bar at the bottom of the screen for selecting different destinations.
17. **BottomNavigationBarItem:** An item in a bottom navigation bar.
18. **SingleChildScrollView:** A box in which a single widget can be scrolled.
19. **AnimatedOpacity:** Animates the opacity of a widget.
20. **Center:** Centers its child within itself.
21. **MaterialPageRoute:** A route that replaces the entire screen with a platform-adaptive transition.
22. **Navigator.push:** Method to push a route onto the navigator's stack.
23. **Icon:** A graphical icon widget.
24. **InputDecoration:** Styles the visual appearance of a TextField.
25. **OutlineInputBorder:** A border for TextField with a rectangular outline.

Code:

main.dart:

```
import 'package:flutter/material.dart';
import 'package:firebase_auth/firebase_auth.dart';
import 'package:get/get.dart';
import '../screen/weight_page.dart'; // Import the weight entry page
import 'login.dart'; // Import the login page
```

```
class Homepage extends StatefulWidget {
  const Homepage({super.key});
```

```
  @override
  State<Homepage> createState() => _HomepageState();
}
```

```
class _HomepageState extends State<Homepage> {
  void selectGender(String gender) {
    Navigator.push(
      context,
      MaterialPageRoute(
        builder: (context) => WeightPage(selectedGender: gender),
      ),
    );
  }
}
```

```
// Sign out function
```

```
void signOut() async {
  await FirebaseAuth.instance.signOut();
  Get.offAll(() => Login()); // Redirect to login page after sign out
}
```

```
@override
Widget build(BuildContext context) {
  return Scaffold(
    extendBodyBehindAppBar: true,
    appBar: AppBar(
```

```
title: Text("Select Gender"),
backgroundColor: Colors.transparent,
elevation: 0,
actions: [
  IconButton(
    icon: Icon(Icons.logout, color: Colors.white),
    onPressed: signOut,
  ),
],
),
body: Container(
  decoration: BoxDecoration(
    gradient: LinearGradient(
      colors: [Colors.blueAccent, Colors.purpleAccent],
      begin: Alignment.topLeft,
      end: Alignment.bottomRight,
    ),
  ),
  child: Center(
    child: Padding(
      padding: const EdgeInsets.symmetric(horizontal: 25.0),
      child: Column(
        mainAxisAlignment: MainAxisAlignment.min,
        children: [
          Text(
            "Select your gender",
            style: TextStyle(
              fontSize: 24,
              fontWeight: FontWeight.bold,
              color: Colors.white,
            ),
          ),
          SizedBox(height: 20),
          GestureDetector(
            onTap: () => selectGender("Male"),
            child: Container(
              decoration: BoxDecoration(
```

```

        color: Colors.blue.shade700,
        borderRadius: BorderRadius.circular(12),
    ),
    padding: EdgeInsets.all(12),
    child: Column(
      children: [
        Image.asset(
          "lib/assets/images/male.jpg",
          height: 120,
        ),
        SizedBox(height: 10),
        Text(
          "Male",
          style: TextStyle(fontSize: 18, color: Colors.white),
        ),
      ],
    ),
  ),
),
SizedBox(height: 15),
GestureDetector(
  onTap: () => selectGender("Female"),
  child: Container(
    decoration: BoxDecoration(
      color: Colors.pinkAccent.shade700,
      borderRadius: BorderRadius.circular(12),
    ),
    padding: EdgeInsets.all(12),
    child: Column(
      children: [
        Image.asset(
          "lib/assets/images/female.jpg",
          height: 120,
        ),
        SizedBox(height: 10),
        Text(
          "Female",

```

```
        style: TextStyle(fontSize: 18, color: Colors.white),
      ),
    ],
  ),
),
),
],
),
),
),
),
);
}
}
```

Output:

