MAD & PWA Lab
Journal

Experiment No.	04
Experiment Title.	To design Flutter UI by including common widgets.
Roll No.	60
Name	Pranav Titambe
Class	D15A
Subject	MAD & PWA Lab
Lab Outcome	LO2: Design and Develop interactive Flutter App by using widgets, layouts, gestures and animation
Grade:	

Aim:

To design Flutter UI by including common widgets.

Program:

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

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

  @override
  State<Login> createState() => _LoginState();
}

class _LoginState extends State<Login> {
  final TextEditingController emailController = TextEditingController();
  final TextEditingController passwordController = TextEditingController();
  @override
  Widget build(BuildContext context) {
    return Scaffold(
      backgroundColor: const Color(0xFFE1FFBB), // Light Teal Background
      body: Center(
        child: Padding(
          padding: const EdgeInsets.symmetric(horizontal: 32),
          child: Card(
            color: Color(0xFFC0F2E0),
            elevation: 5,
            shape: RoundedRectangleBorder(
              borderRadius: BorderRadius.circular(16),
            ),
            child: Padding(
              padding: const EdgeInsets.all(24),
              child: Column(
                mainAxisSize: MainAxisSize.min,
                children: [
                  const Text(
                    "Welcome Back!",
                    style: TextStyle(
                      fontSize: 22,
                      fontWeight: FontWeight.bold,
                      color: Color(0xFF001A6E),
                    ),
                  ),
                  const SizedBox(height: 10),
                  const Text(
                    "Login to your account",
                    style: TextStyle(
                      fontSize: 16,
                      color: Colors.black54,
                    ),
                  ),
                  const SizedBox(height: 20),
```

```dart
// Email Field
TextField(
 controller: emailController,
 decoration: InputDecoration(
  labelText: "Email",
  prefixIcon: const Icon(Icons.email),
  border: OutlineInputBorder(
   borderRadius: BorderRadius.circular(10),
  ),
 ),
),
const SizedBox(height: 16),

// Password Field
TextField(
 controller: passwordController,
 obscureText: true,
 decoration: InputDecoration(
  labelText: "Password",
  prefixIcon: const Icon(Icons.lock),
  border: OutlineInputBorder(
   borderRadius: BorderRadius.circular(10),
  ),
 ),
),
const SizedBox(height: 20),

// Login Button
ElevatedButton(
 onPressed: () {
  // TODO: Implement login logic
  print("Email: ${emailController.text}");
  print("Password: ${passwordController.text}");
 },
 style: ElevatedButton.styleFrom(
  backgroundColor: const Color(0xFF074799), // Deep Blue
  padding: const EdgeInsets.symmetric(
    horizontal: 40, vertical: 12),
  shape: RoundedRectangleBorder(
   borderRadius: BorderRadius.circular(8),
  ),
 ),
 child: const Text(
  "Login",
  style: TextStyle(
   fontSize: 16,
   color: Color(0xFFE1FFBB), // Light Greenish-Yellow
  ),
 ),
),
const SizedBox(height: 10),

// Forgot Password & Signup Text
TextButton(
```

```dart
            onPressed: () {
              // TODO: Implement Forgot Password Logic
              print("Forgot Password");
            },
            child: const Text(
              "Forgot Password?",
              style: TextStyle(color: Colors.black54),
            ),
          ),
          TextButton(
            onPressed: () {
              // TODO: Implement Signup Navigation
            },
            child: const Text(
              "Don't have an account? Sign up",
              style: TextStyle(color: Colors.black54),
            ),
          ),
        ],
      ),
    ),
  ),
),
);
  }
}
```
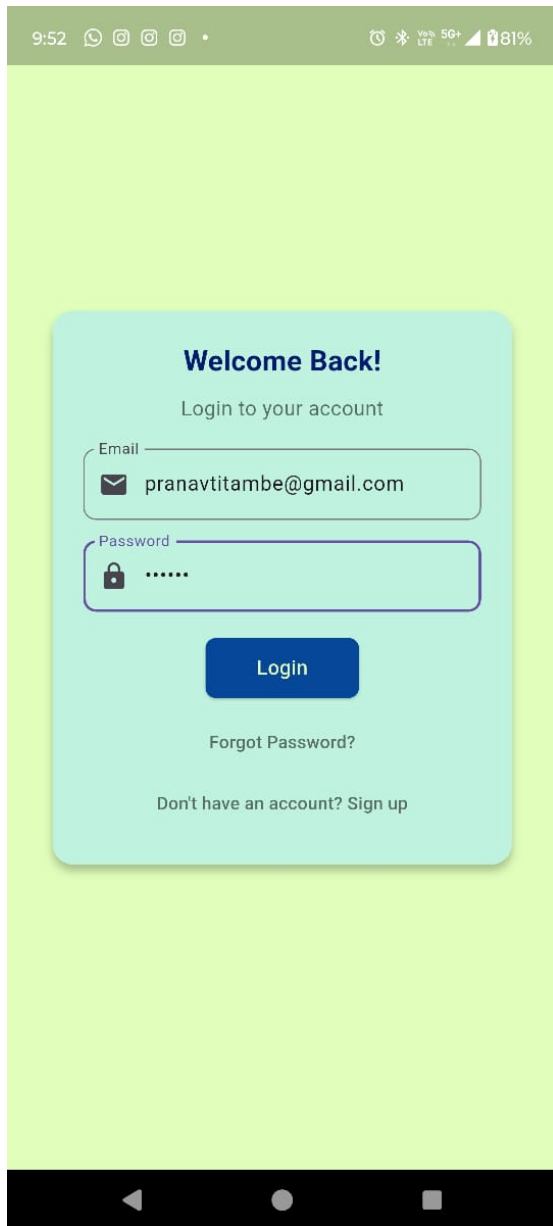
Output:

Common widgets used-

1. Scaffold
   - The main structure of the screen.
   - Provides the base layout like body.

2. Stack
   - Places widgets on top of each other (background image, button, and login form).

3. Container
   - Used for styling and layout purposes (background image, white login box).

4. BoxDecoration
   - Adds styling inside Container (background image, rounded corners).

5. DecorationImage
   - Used inside BoxDecoration to set an image as a background.

6. Align
   - Positions widgets at specific places (Skip button at the top-right, login box at the bottom).

7. Padding
   - Adds spacing around widgets.

8. TextButton
   - Used for the "Skip" button.

9. Column
   - Arranges widgets vertically inside the login box.

10. Text
    - Displays static text (NYKAA FASHION, Login or Signup, Stay stylish...).

11. SizedBox
    - Adds empty space between widgets.

12. TextField
    - Takes user input (mobile number).

13. InputDecoration
    - Adds a border and placeholder text (Enter mobile no.) inside TextField.

14. OutlineInputBorder
    - Provides a border for the TextField.

15. ElevatedButton
    - The "Get OTP" button.

16. TextStyle
    - Used to style text (color, font size, weight).

17. BorderRadius
    - Rounds corners of the white login box.