

Project title: Snapchat

Roll No : 63

MAD & PWA Lab Journal

Experiment No.	02
Experiment Title.	To design Flutter UI by including common widgets.
Roll No.	63
Name	Diksha Utekar
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.

Theory:

Flutter follows a widget-based approach where everything in the UI is a widget. Widgets can be classified into two main types:

- Stateless Widgets: Do not change their state once built (e.g., Text, Container).
- Stateful Widgets: Can update dynamically based on user interaction (e.g., TextField, Checkbox).

Commonly Used Widgets in Flutter-

- Scaffold Widget

The Scaffold widget provides the basic structure for a Flutter app, including an AppBar, Drawer, FloatingActionButton, and BottomNavigationBar. It is a fundamental widget used to create a standard screen layout in Flutter.

- Container Widget

A Container is a box model widget that can hold other widgets. It is commonly used for adding padding, margins, borders, and background decorations.

- Row and Column Widgets

- Row: Arranges widgets horizontally.
- Column: Arranges widgets vertically.

These two widgets are fundamental for designing layouts in Flutter.

- ListView Widget

The ListView widget is used for displaying a scrollable list of items. It is useful for showing large amounts of data dynamically.

- Stack Widget

The Stack widget is used to place widgets on top of each other. This is useful for creating overlapping UI elements such as banners, profile images, or layered designs.

- ElevatedButton Widget

The ElevatedButton widget is used for clickable buttons with a raised effect. It is a commonly used button in Flutter applications.

- TextField Widget

The TextField widget is used to take user input, such as entering a name, email, or password. It is commonly used in forms and authentication screens.

Code:

main.dart file

```
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(),
      },
    );
  }
}

```





LOG IN

SIGN UP



Log in to Snapchat

Username or Email

example@gmail.com

Password

.....|

[Forgot Password](#)

Log In

New To Snapchat? [Sign Up](#)



Sign Up for Snapchat

First Name

Last Name

Username

Password

Show

Phone Number

NG +234

Birthday

03/22/2003