**Objective:-** To install and configure Flutter Environment. Create an app to display  "Hello Username" and on press button to display a greeting message.

**Code :-**

import 'package:flutter/material.dart';

void main() {

  runApp(const MyApp());

}

class MyApp extends StatelessWidget {

  const MyApp({*super*.key});

  @override

  Widget build(BuildContext context) {

    return MaterialApp(

      title: 'Flutter Demo',

      debugShowCheckedModeBanner: false, *// Remove the debug ribbon from the app*

      theme: ThemeData(

        colorScheme: ColorScheme.fromSeed(seedColor: Colors.deepPurple),

        useMaterial3: true,

      ),

      home: GreetingScreen(), *// The home screen of the app is GreetingScreen*

    );

  }

}

*// GreetingScreen - A stateful widget as it will manage dynamic state*

class GreetingScreen extends StatefulWidget {

  @override

  \_GreetingScreenState createState() => \_GreetingScreenState();

}

*// State class for GreetingScreen*

class \_GreetingScreenState extends State<GreetingScreen> {

  String username = ''; *// Variable to store the username entered by the user*

  String greetingMessage =

      ''; *// Variable to store the greeting message generated*

  TextEditingController controller =

      TextEditingController(); *// Controller for managing the TextField input*

*// Function to generate a greeting message based on the input username*

  void generateGreeting() {

    setState(() {

      greetingMessage =

          'Hello $*username*, Greetings of the day!'; *// Update greeting message*

    });

  }

  @override

  Widget build(BuildContext context) {

    return Scaffold(

      appBar: AppBar(

        title: const Text(

          'Greetings App',

          style: TextStyle(

            color: Colors.white,

            fontWeight: FontWeight.bold,

          ),

        ),

        backgroundColor: Colors.deepPurple, *// Set the app bar background color*

      ),

      body: Padding(

        padding: const EdgeInsets.all(16.0), *// Add padding to the content*

        child: Column(

          mainAxisAlignment:

              MainAxisAlignment.center, *// Center the content vertically*

          children: <Widget>[

*// TextField for entering the username*

            TextField(

              controller: controller, *// Connect controller to capture the input*

              decoration: const InputDecoration(

                labelText: 'Enter your Username', *// Label for the text field*

                border:

                    OutlineInputBorder(), *// Add an outline border around the text field*

              ),

              onChanged: (text) {

*// Update the username as the text field changes*

                username = text;

              },

            ),

            const SizedBox(height: 20), *// Add some space between the widgets*

*// Button to trigger the greeting generation*

            ElevatedButton(

              onPressed:

                  generateGreeting, *// Call the generateGreeting function when pressed*

              child: const Text('Greet Me'),

            ),

            const SizedBox(height: 20), *// Add space between button and message*

*// Display the generated greeting message*

            Text(

              greetingMessage,

              style: const TextStyle(

                  fontSize: 18,

                  fontWeight:

                      FontWeight.bold), *// Style for the greeting message*

            ),

          ],

        ),

      ),

    );

  }

}

**Output:-**



