Experiment no. :- 03

Aim :- To include icons, images, fonts in Flutter app

Theory :-

1) Button: the Button widget is not a specific widget, but rather a category of widgets that are used to handle user interaction by triggering actions when pressed. Some commonly used button widgets include: Elevated Button , Textfield Button, Outlined button etc

2.) Textfield with Icon: In Flutter, a TextField widget is used to allow users to input text. It is a fundamental part of many forms and input-based user interfaces. TextField provides a text input area where users can enter and edit text, and it comes with various customization options.

3.) Image : This widget holds the image which can fetch it from multiple sources like from the asset folder or directly from the URL. To add an image in the project, you need first to create an assets folder where you keep your images and then add the below line in pubspec.yaml file.

4.) Gesture Detection: To make an image interactive like a button, you need to detect user gestures such as taps. Flutter provides gesture detection widgets like GestureDetector .These widgets allow you to listen for various touch events like taps, swipes, and drags.I used this widget to make image as a button.

5.) Icon Button: Flutter provides the IconButton widget, which combines an icon with a tappable area, making it easy to create interactive icons that respond to user taps. The IconButton widget is commonly used for actions like navigation, opening menus, submitting forms, etc.

Code :-

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

import 'package:flutter_to_do_list/const/colors.dart';

import 'package:flutter_to_do_list/data/auth_data.dart';


class LogIN_Screen extends StatefulWidget {
  final VoidCallback show;
  LogIN_Screen(this.show, {super.key});


  @override
  State<LogIN_Screen> createState() => _LogIN_ScreenState();
}


class _LogIN_ScreenState extends State<LogIN_Screen> {
  FocusNode _focusNode1 = FocusNode();
  FocusNode _focusNode2 = FocusNode();


  final email = TextEditingController();
  final password = TextEditingController();


  @override
  void initState() {
    // TODO: implement initState
    super.initState();
    _focusNode1.addListener(() {
      setState(() {});
```

```dart
    });
    super.initState();
    _focusNode2.addListener(() {
      setState(() {});
    });
  }


  @override
  Widget build(BuildContext context) {
    return Scaffold(
      backgroundColor: backgroundColors,
      body: SafeArea(
        child: SingleChildScrollView(
          child: Column(
            children: [
              SizedBox(height: 20),
              image(),
              SizedBox(height: 50),
              textfield(email, _focusNode1, 'Email', Icons.email),
              SizedBox(height: 10),
              textfield(password, _focusNode2, 'Password', Icons.password),
              SizedBox(height: 8),
              account(),
              SizedBox(height: 20),
              Login_bottom(),
            ],
```

```dart
        ),
      ),
    ),
  );
}


Widget account() {
  return Padding(
    padding: const EdgeInsets.symmetric(horizontal: 15),
    child: Row(
      mainAxisAlignment: MainAxisAlignment.end,
      children: [
        Text(
          "Don't have an account?",
          style: TextStyle(color: Colors.grey[700], fontSize: 14),
        ),
        SizedBox(width: 5),
        GestureDetector(
          onTap: widget.show,
          child: Text(
            'Sign UP',
            style: TextStyle(
                color: Colors.blue,
                fontSize: 14,
                fontWeight: FontWeight.bold),
          ),
```

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


Widget Login_bottom() {
  return Padding(
    padding: const EdgeInsets.symmetric(horizontal: 15),
    child: GestureDetector(
      onTap: () {
        AuthenticationRemote().login(email.text, password.text);
      },
      child: Container(
        alignment: Alignment.center,
        width: double.infinity,
        height: 50,
        decoration: BoxDecoration(
          color: custom_green,
          borderRadius: BorderRadius.circular(10),
        ),
        child: Text(
          'LogIn',
          style: TextStyle(
            color: Colors.white,
            fontSize: 23,
```

```dart
          fontWeight: FontWeight.bold,
        ),
      ),
    ),
  ),
 );
}


Widget textfield(TextEditingController _controller, FocusNode _focusNode,
  String typeName, IconData iconss) {
 return Padding(
  padding: const EdgeInsets.symmetric(horizontal: 15),
  child: Container(
   decoration: BoxDecoration(
    color: Colors.white,
    borderRadius: BorderRadius.circular(15),
   ),
   child: TextField(
    controller: _controller,
    focusNode: _focusNode,
    style: TextStyle(fontSize: 18, color: Colors.black),
    decoration: InputDecoration(
     prefixIcon: Icon(
      iconss,
      color: _focusNode.hasFocus ? custom_green : Color(0xffc5c5c5),
     ),
```

```dart
        contentPadding:
          EdgeInsets.symmetric(horizontal: 15, vertical: 15),
        hintText: typeName,
        enabledBorder: OutlineInputBorder(
          borderRadius: BorderRadius.circular(10),
          borderSide: BorderSide(
            color: Color(0xffc5c5c5),
            width: 2.0,
          ),
        ),
        focusedBorder: OutlineInputBorder(
          borderRadius: BorderRadius.circular(10),
          borderSide: BorderSide(
            color: custom_green,
            width: 2.0,
          ),
        )),
    ),
   ),
  );
}


Widget image() {
 return Padding(
   padding: const EdgeInsets.symmetric(horizontal: 15),
   child: Container(
```

```
      width: double.infinity,

      height: 300,

      decoration: BoxDecoration(

        color: backgroundColors,

        image: DecorationImage(

          image: AssetImage('images/7.png'),

          fit: BoxFit.fitWidth,

        ),

      ),

    ),

  );

}
```

Output :-