

**Name :- Hertika Batra**

**Roll:-5**

**Batch:-A**

## **Experiment:2**

**Aim:- to design flutter UI including common widgets**

### **Theory:-**

Flutter is Google's UI toolkit for crafting beautiful, natively compiled iOS and Android apps from a single code base. To build any application we start with widgets – The building block of flutter applications. Widgets describe what their view should look like given their current configuration and state. It includes a text widget, row widget, column widget, container widget, and many more.

Widgets: Each element on a screen of the Flutter app is a widget. The view of the screen completely depends upon the choice and sequence of the widgets used to build the apps. And the structure of the code of an apps is a tree of widgets.

### **Category of Widgets:**

There are mainly 14 categories in which the flutter widgets are divided. They are mainly segregated on the basis of the functionality they provide in a flutter application.

1. Accessibility: These are the set of widgets that make a flutter app more easily accessible.
2. Animation and Motion: These widgets add animation to other widgets.
3. Assets, Images, and Icons: These widgets take charge of assets such as display images and show icons.
4. Async: These provide async functionality in the flutter application.
5. Basics: These are the bundle of widgets that are absolutely necessary for the development of any flutter application.
6. Cupertino: These are the iOS designed widgets.

7. Input: This set of widgets provides input functionality in a flutter application.
8. Interaction Models: These widgets are here to manage touch events and route users to different views in the application.
9. Layout: This bundle of widgets helps in placing the other widgets on the screen as needed.
10. Material Components: This is a set of widgets that mainly follow material design by Google.
11. Painting and effects: This is the set of widgets that apply visual changes to their child widgets without changing their layout or shape.
12. Scrolling: This provides scrollability of to a set of other widgets that are not scrollable by default.
13. Styling: This deals with the theme, responsiveness, and sizing of the app.
14. Text: This displays text.

**Code:-**

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

import 'package:driveclone/firebase.dart';

class StorageContainer extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return Container(
      margin: const EdgeInsets.only(left: 15, right: 15),
      decoration: BoxDecoration(
        borderRadius: BorderRadius.circular(10),
        color: Colors.grey.shade100,
        boxShadow: [
          BoxShadow(
            color: Colors.grey.withOpacity(0.001),
```

```
        offset: const Offset(10, 10),
        blurRadius: 10,
    ),
    BoxShadow(
        color: Colors.grey.withOpacity(0.001),
        offset: const Offset(-10, 10),
        blurRadius: 10,
    ),
],
),
child: Padding(
    padding: const EdgeInsets.only(top: 25.0, bottom: 35),
    child: Column(
        children: [
            Container(
                width: 150,
                height: 150,
                decoration: BoxDecoration(
                    shape: BoxShape.circle,
                    color: Colors.white,
                    boxShadow: [
                        BoxShadow(color: Colors.grey.withOpacity(0.5), blurRadius: 10),
                    ],
                ),
            ),
            child: Column(
                mainAxisAlignment: MainAxisAlignment.center,
                children: [
                    Row(
                        mainAxisAlignment: MainAxisAlignment.center,
                        children: [
```

```
Text(
  "20",
  style: textStyle(50, const Color(0xff635C9B), FontWeight.bold),
),
Text(
  "%",
  style: textStyle(17, const Color(0xff635C9B), FontWeight.bold),
)
],
),
Text(
  "Used",
  style: textStyle(20, Colors.black.withOpacity(0.7), FontWeight.bold),
),
],
),
),
SizedBox(
  height: 20,
),
Row(
  mainAxisAlignment: MainAxisAlignment.spaceAround,
  children: [
    Column(
      children: [
        Container(
          width: 18,
          height: 18,
          decoration: BoxDecoration(
            borderRadius: BorderRadius.circular(5),
```

```
        color: Colors.deepOrangeAccent,
      ),
    ),
    SizedBox(height: 5),
    Text(
      "Used",
      style: TextStyle(
        fontSize: 18,
        color: Colors.black.withOpacity(0.7),
        fontWeight: FontWeight.w600,
      ),
    ),
    Text(
      "45 GB",
      style: textStyle(20, const Color(0xff635C9B), FontWeight.w600),
    )
  ],
),
Column(
  children: [
    Container(
      width: 18,
      height: 18,
      decoration: BoxDecoration(
        borderRadius: BorderRadius.circular(5),
        color: Colors.grey.withOpacity(0.25),
      ),
    ),
    SizedBox(height: 5),
    Text(
```

```

        "Free",
        style: TextStyle(
          fontSize: 18,
          color: Colors.black.withOpacity(0.7),
          fontWeight: FontWeight.w600,
        ),
      ),
      Text(
        "100 GB",
        style: textStyle(20, const Color(0xff635C9B), FontWeight.w600),
      )
    ],
  ),
],
),
],
),
],
),
),
);
}

```

```

TextStyle textStyle(double fontSize, Color color, FontWeight fontWeight) {
  return TextStyle(
    fontSize: fontSize,
    color: color,
    fontWeight: fontWeight,
  );
}
}

```

Output:-

4:39

