

## Experiment 2

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**Aim:** To design Flutter UI by including common widgets.

### Theory:

**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 app 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.

Description of few of the widgets are as follows:

- Scaffold – Implements the basic material design visual layout structure.
- App-Bar – To create a bar at the top of the screen.
- Text - To write anything on the screen.
- Container – To contain any widget.
- Center – To provide center alignment to other widgets.

CODE :

```
import 'package:dunzo/widget/widget_support.dart';
import 'package:flutter/material.dart';
```

```
class Home extends StatefulWidget {
  const Home({Key? key}) : super(key: key);
```

```
  @override
  State<Home> createState() => _HomeState();
}
```

```
class _HomeState extends State<Home> {
  @override
  Widget build(BuildContext context) {
    return Scaffold(
      body: Container(
        margin: const EdgeInsets.only(top: 20.0, left: 20.0, right: 10.0),
        child: Column(
          crossAxisAlignment: CrossAxisAlignment.start,
          children: [
            Row(
              mainAxisAlignment: MainAxisAlignment.spaceBetween,
              children: [
                Text(
                  "Hello Nilanchala,",
                  style: AppWidget.boldTextFieldStyle(),
                ),
                Padding(
                  padding: const EdgeInsets.fromLTRB(0, 0, 10.0, 0),
                  child: Container(
                    decoration: BoxDecoration(
                      color: Colors.black,
                      borderRadius: BorderRadius.circular(8)),
                    child: const Icon(Icons.shopping_cart, color: Colors.white),
                  ),
                ),
              ],
            ),
          ],
        ),
      ),
    );
  }
}
```

```

    )
  ],
),

const SizedBox(height: 15.0),
// MAIN HEADING -
Text(
  "Order Your Food Now!",
  style: AppWidget.headerTextFieldStyle(),
),
// SUBHEADING -
Text(
  "Discover and Get Fresh Vegetables",
  style: AppWidget.lightTextFieldStyle(),
),

const SizedBox(height: 10.0),

Row(
  children: [
    ClipRRect(
      borderRadius: BorderRadius.circular(15.0),
      child: Material(
        elevation: 20.0,
        // ignore: avoid_unnecessary_containers
        child: Container(
          child: Image.asset(
            "images/mainBanner.jpg",
            height: 150,
            width: 340,
            fit: BoxFit.cover,
          ),
        ),
      ),
    ),
  ],
),

Row(
  mainAxisAlignment: MainAxisAlignment.spaceEvenly,
  children: [
    ClipRRect(
      borderRadius: BorderRadius.circular(15.0),
      child: Material(

```

```

        elevation: 20.0,
        // ignore: avoid_unnecessary_containers
        child: Container(
          child: Image.asset(
            "images/fruitBasket.png",
            height: 160,
            width: 160,
            fit: BoxFit.cover,
          ),
        ),
      ),
    ),
    const SizedBox(width: 10), // Add some space between the images
    ClipRRect(
      borderRadius: BorderRadius.circular(15.0),
      child: Material(
        elevation: 20.0,
        // ignore: avoid_unnecessary_containers
        child: Container(
          child: Image.asset(
            "images/fruitBasket.png", // Replace with your second image path
            height: 160,
            width: 160,
            fit: BoxFit.cover,
          ),
        ),
      ),
    ),
  ],
)
],
),
),
);
}
}

```

## OUTPUT:

