

Experiment - 3

Aim: To include icons, images, fonts in flutter app.

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.

Types of Widgets:

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.

There are broadly two types of widgets in the flutter:

1. Stateless Widget

Stateless Widgets are static and don't hold mutable state

2. Stateful Widget

Stateful Widgets are dynamic, and they maintain a mutable state that can change over time.

Code-

```
import 'package:firebase_core/firebase_core.dart';
import 'package:flutter/material.dart';
import 'account_page.dart'; // Import the account_page.dart file
```

```
void main() async {
  WidgetsFlutterBinding.ensureInitialized();
  await Firebase.initializeApp();
  runApp(MyApp());
}
```

```
class MyApp extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      title: 'Ajit-like AppBar',
      theme: ThemeData(
        primarySwatch: Colors.blue,
      ),
      home: MyHomePage(),
    );
  }
}
```

```
class MyHomePage extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        backgroundColor: Colors.white,
        elevation: 0,
        title: Row(
          children: [
            Expanded(
              child: Container(
                height: 40,
                decoration: BoxDecoration(
                  color: Colors.grey[200],
```

```

        borderRadius: BorderRadius.circular(20),
      ),
      child: Row(
        children: [
          Padding(
            padding: const EdgeInsets.all(8.0),
            child: Image.asset(
              'assets/ajio.png', // Replace with your image asset
              width: 24,
              height: 24,
            ),
          ),
          Expanded(
            child: TextField(
              decoration: InputDecoration(
                hintText: 'Search',
                border: InputBorder.none,
              ),
            ),
          ),
          Padding(
            padding: const EdgeInsets.all(8.0),
            child: Icon(
              Icons.camera_alt,
              color: Colors.grey,
            ),
          ),
        ],
      ),
    ),
    SizedBox(width: 16),
    Icon(
      Icons.notifications,
      color: Colors.black,
    ),
    SizedBox(width: 16),
    Icon(
      Icons.favorite_border,
      color: Colors.black,
    ),
    SizedBox(width: 16),
    Icon(
      Icons.shopping_cart,

```

```

        color: Colors.black,
      ),
    ],
  ),
),
body: Column(
  crossAxisAlignment: CrossAxisAlignment.start,
  children: [
    SizedBox(height: 8),
    Container(
      height: 50,
      child: ListView(
        scrollDirection: Axis.horizontal,
        children: [
          CategoryItem(image: 'assets/men_categories.jpg', name: 'Men'), // Replace with category image
          CategoryItem(image: 'assets/women_categories.png', name: 'Women'), // Replace with category
image
          CategoryItem(image: 'assets/kids_categories.png', name: 'Kids'), // Replace with category image
          CategoryItem(image: 'assets/bags.png', name: 'Accessories'),
          CategoryItem(image: 'assets/foots.png', name: 'Footwear'),
        ],
      ),
    ),
    SizedBox(height: 16),
    Container(
      width: double.infinity,
      padding: EdgeInsets.symmetric(horizontal: 16, vertical: 8),
      decoration: BoxDecoration(
        gradient: LinearGradient(
          begin: Alignment.topLeft,
          end: Alignment.bottomRight,
          colors: [Color(0xFFFFCDB1), Color(0xFFE99A6B)],
        ),
        borderRadius: BorderRadius.circular(12),
      ),
      child: Text(
        'Hurry up! Sale is live!',
        style: TextStyle(
          fontSize: 24,
          fontWeight: FontWeight.bold,
          color: Colors.white,
        ),
      ),
    ),
  ],
),
),
),

```

```

        SizedBox(height: 16),
        ClipRRect(
          borderRadius: BorderRadius.circular(16),
          child: Image.asset(
            'assets/sale_image.jpg', // Replace with your sale image asset
            fit: BoxFit.cover,
            height: MediaQuery.of(context).size.height * 0.5, // Adjust the height as needed
            width: double.infinity,
          ),
        ),
        SizedBox(height: 16),
        Container(
          height: MediaQuery.of(context).size.height * 0.1, // Set to the same height as the "Hurry up!"
container
          margin: EdgeInsets.symmetric(horizontal: 16),
          child: ListView(
            scrollDirection: Axis.horizontal,
            children: [
              PaymentBox(
                logo: 'assets/paytm.png', // Replace with Paytm logo asset
                message: 'Pay with Paytm\nfor exciting discounts!',
              ),
              PaymentBox(
                logo: 'assets/sbi.png', // Replace with UPI logo asset
                message: 'Get discounts on\nUPI payments!',
              ),
              // Add more payment options as needed
            ],
          ),
        ),
      ],
    ),
    bottomNavigationBar: BottomNavigationBar(
      items: [
        BottomNavigationBarItem(
          icon: Icon(Icons.store),
          label: 'Switch Stores',
        ),
        BottomNavigationBarItem(
          icon: Icon(Icons.home),
          label: 'Explore',
        ),
        BottomNavigationBarItem(
          icon: Icon(Icons.trending_up),

```

```

        label: 'TRENDin',
    ),
    BottomNavigationBarItem(
        icon: Icon(Icons.category),
        label: 'Categories',
    ),
    BottomNavigationBarItem(
        icon: Icon(Icons.account_circle),
        label: 'Account',
    ),
],
selectedItemColor: Colors.black,
unselectedItemColor: Colors.black,
showUnselectedLabels: true,
type: BottomNavigationBarType.fixed,
onTap: (int index) {
    // Handle bottom navigation item clicks
    if (index == 4) {
        // Index 4 corresponds to the 'Account' icon
        Navigator.push(
            context,
            MaterialPageRoute(builder: (context) => AccountPage()),
        );
    }
},
),
);
}
}

```

```

class CategoryItem extends StatelessWidget {
    final String image;
    final String name;

    CategoryItem({required this.image, required this.name});

```

```

    @override
    Widget build(BuildContext context) {
        return Padding(
            padding: const EdgeInsets.all(8.0),
            child: Row(
                children: [
                    Container(
                        width: 60,

```

```

        height: 60,
        decoration: BoxDecoration(
          shape: BoxShape.circle,
          image: DecorationImage(
            image: AssetImage(image),
            fit: BoxFit.cover,
          ),
        ),
      ),
    ),
    SizedBox(width: 8),
    Text(
      name,
      style: TextStyle(fontSize: 15),
    ),
  ],
),
);
}
}

class PaymentBox extends StatelessWidget {
  final String logo;
  final String message;

  PaymentBox({required this.logo, required this.message});

  @override
  Widget build(BuildContext context) {
    return Container(
      width: 200,
      margin: EdgeInsets.only(left: 5, right: 10, top: 5, bottom: 5),
      padding: EdgeInsets.all(5),
      decoration: BoxDecoration(
        color: Colors.white,
        border: Border.all(
          color: Colors.blue,
          width: 2,
        ),
      ),
      borderRadius: BorderRadius.circular(12),
    ),
    child: Row(
      mainAxisAlignment: MainAxisAlignment.center,
      children: [
        Padding(
          padding: const EdgeInsets.only(right: 5),

```

```
child: Image.asset(
  logo,
  width: 50,
  height: 50,
),
),
Text(
  message,
  textAlign: TextAlign.center,
  style: TextStyle(
    fontSize: 12,
    color: Colors.blue, // Change to your desired gradient color
    decoration: TextDecoration.none, // Remove underline
    fontWeight: FontWeight.normal,
    fontFamily: 'Roboto', // Change to your desired font
    letterSpacing: 0.5, // Adjust spacing as needed
    shadows: [
      Shadow(
        color: Colors.black.withOpacity(0.3),
        offset: Offset(1, 1),
        blurRadius: 2,
      ),
    ],
  ),
),
],
),
);
}
```


9:50



Search



Men



Women



Kids



Hurry up! Sale is live!



Pay with Paytm
for exciting discounts!

SBI Get discounts
UPI payments