

Experiment 3

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

Theory:

In Flutter, icons, images, and fonts are essential elements used to enhance the user interface and experience of your mobile or web application.

Icons:

Icons in Flutter are used to represent actions, commands, or features within your application. Flutter provides built-in support for a wide range of icons through the Icons class, which includes commonly used icons like add, delete, home, search, etc.

Icon(Icons.add)

Images:

Images in Flutter are used to display visual content such as photos, illustrations, logos, etc. Flutter supports various image formats such as PNG, JPEG, GIF, WebP, and animated WebP. You can include images in your Flutter project by adding them to the assets directory and specifying them in the pubspec.yaml file.

Image.asset('assets/images/my_image.png')

Fonts:

Fonts in Flutter are used to customize the text style and appearance within your application. Flutter supports various font formats such as TrueType (TTF), OpenType (OTF), and Web fonts (WOFF, WOFF2). You can include custom fonts in your Flutter project by adding the font files to the fonts directory and specifying them in the pubspec.yaml file.

Text(

'Hello, Flutter!'

style: TextStyle(

```
    fontFamily: 'MyCustomFont',  
    fontSize: 20,  
  ),  
)
```

Code in main.dart:

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

```
void main() {  
  runApp(UdemyApp());  
}
```

```
class UdemyApp extends StatelessWidget {
```

```
  @override
```

```
  Widget build(BuildContext context) {
```

```
    return MaterialApp(  
      theme: ThemeData(  
        scaffoldBackgroundColor: Colors.black, // Set Scaffold background color to black  
        appBarTheme: AppBarTheme(  
          backgroundColor: Colors.black, // Set AppBar background color to black  
        ),  
      ),  
      home: HomePage(),
```

```
);  
  
}  
  
}
```

```
class HomePage extends StatefulWidget {  
  
  @override  
  _HomePageState createState() => _HomePageState();  
}
```

```
class _HomePageState extends State<HomePage> {  
  
  int _selectedIndex = 0;  
  
  void _onItemTapped(int index) {  
  
    setState(() {  
  
      _selectedIndex = index;  
  
    });  
  
  }  
  
}
```

```
@override  
  
Widget build(BuildContext context) {  
  
  return Scaffold(  
  
    appBar: AppBar(  
  
      title: Text(  
  

```

```
'Welcome, Aaditi Vaibhav Surve',

style: TextStyle(color: Colors.white), // Set text color to white

),

),

body: SingleChildScrollView(

  child: Column(

    crossAxisAlignment: CrossAxisAlignment.start,

    children: [

      Image.asset(

        'images/home.jpg', // Path to your image asset

        height: 440, // Adjust height as needed

        width: MediaQuery.of(context).size.width, // Set width to match screen width

        fit: BoxFit.cover, // Adjust image fit as needed

      ),

      // Add texts below the image

      SizedBox(height: 10),

      Padding(

        padding: EdgeInsets.only(left: 16.0), // Add distance from left side

        child: Text(

          'Learning that fits',

          style: TextStyle(

            color: Colors.white,

            fontFamily: 'Montserrat',
```

```
        fontSize: 18, // Adjust font size as needed

        fontWeight: FontWeight.bold, // Make text bold

    ),

    ),

    ),

    SizedBox(height: 7),

    Padding(

        padding: EdgeInsets.only(left: 16.0), // Add distance from left side

        child: Text(

            'Skills for your present (and future)',

            style: TextStyle(color: Colors.white),

        ),

    ),

    SizedBox(height: 10),

    Padding(

        padding: EdgeInsets.only(left: 16.0), // Add distance from left side

        child: Text(

            'Learning for your career?',

            style: TextStyle(

                color: Colors.white,

                fontSize: 18, // Adjust font size as needed

                fontWeight: FontWeight.bold, // Make text bold

            ),
```

```
    ),  
    ),  
    SizedBox(height: 7),  
    Padding(  
      padding: EdgeInsets.only(left: 16.0), // Add distance from left side  
      child: Text(  
        'Answer two quick questions for recommendations that match your career goals.',  
        style: TextStyle(color: Colors.white),  
      ),  
    ),  
  ],  
),  
),  
bottomNavigationBar: BottomNavigationBar(  
  backgroundColor: Colors.black,  
  selectedIconTheme: IconThemeData(color: Colors.white),  
  selectedLabelStyle: TextStyle(color: Colors.white), // Set selected label color to white  
  unselectedIconTheme: IconThemeData(color: Colors.grey),  
  unselectedLabelStyle: TextStyle(color: Colors.grey), // Set unselected label color to grey  
  iconSize: 26.0,  
  selectedFontSize: 14.0,  
  unselectedFontSize: 12.0,  
  currentIndex: 0,
```

```
onTap: _onItemTapped,  
type: BottomNavigationBarType.fixed,  
items: [  
  BottomNavigationBarItem(  
    icon: Icon(Icons.home),  
    label: 'Featured',  
  ),  
  BottomNavigationBarItem(  
    icon: Icon(Icons.search),  
    label: 'Search',  
  ),  
  BottomNavigationBarItem(  
    icon: Icon(Icons.star),  
    label: 'Featured',  
  ),  
  BottomNavigationBarItem(  
    icon: Icon(Icons.school),  
    label: 'My Learning',  
  ),  
  BottomNavigationBarItem(  
    icon: Icon(Icons.person),  
    label: 'Profile',  
  ),
```

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

Output:

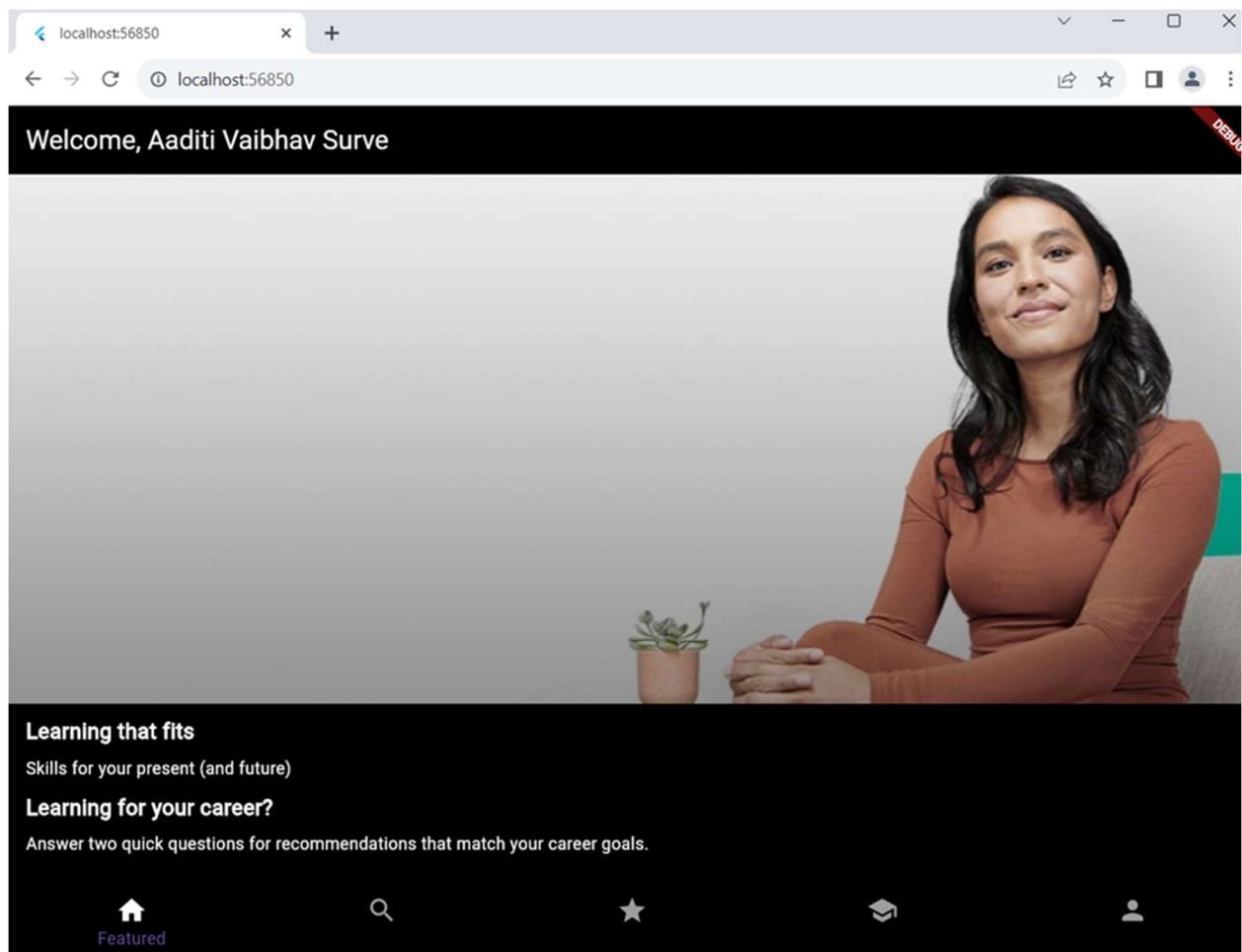


Image:

- The image is loaded using Image.asset.
- Path to the image asset: 'images/home.jpg'
- It is displayed as the first child of the Column in the body of the Scaffold.

- It has a height of 440 and its width is set to match the screen width using `MediaQuery.of(context).size.width`.
- The image's fit is set to `BoxFit.cover`, which means it will be resized to cover the entire container while maintaining its aspect ratio.

Icons:

- Icons are used within the `BottomNavigationBarItem` widgets in the `BottomNavigationBar`.
- The following icons are used:
 - `Icons.home` for the "Featured" tab.
 - `Icons.search` for the "Search" tab.
 - `Icons.star` for the "Featured" tab (second occurrence).
 - `Icons.school` for the "My Learning" tab.
 - `Icons.person` for the "Profile" tab.
- Each `BottomNavigationBarItem` consists of an icon and a label.