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BATCH : B

ROLL NO. 39

### **MADPWALAB3**

#### **AIM:**

To include icons, images, fonts in flutter app.

#### **THEORY:**

##### **1. Icons:**

- Flutter's Icon widget is a versatile tool for incorporating Material Design icons into your app's user interface. These icons are scalable and adapt well to different screen sizes and resolutions
- font\_awesome\_flutter is a popular package that provides access to the Font Awesome icon library, which includes thousands of icons covering a wide range of categories such as social media, user interface, and more.

##### **2. Images:**

- The Image widget in Flutter facilitates the display of images within your app's UI. Images can be loaded from various sources, including local assets, network URLs, and other external sources.
- Loading images from local assets involves placing image files in the assets directory of your Flutter project and referencing them using the Image.asset() constructor.

##### **3. Fonts:**

- Custom fonts allow developers to personalize the typography of their Flutter applications, creating unique and visually appealing user interfaces.
- Integrating custom fonts in Flutter involves adding font files (typically in TrueType Font or OpenType Font format) to the project's fonts directory or any designated directory.
- It is important to declare these custom font files in the pubspec.yaml file using the fonts section. This informs Flutter about the existence and location of the custom fonts within the project.
- Once the fonts are properly declared in the pubspec.yaml file, developers can reference them in their Flutter code using the TextStyle class, specifying the desired font family and size for text elements.

## SYNTAX:

### 1. Icons:

Icon(Icons.search),

If we are using FontAwesomeIcons Library:

Falcon(FontAwesomeIcons.star);

(Also this library needs to be added to pubspec.yaml file to be able to be used.)

### 2. Images:

Loading image from assets

Image.asset('assets/image.png');

Loading image from the internet

Image.network(<https://example.com/image.jpg>);

### 3. Fonts:

// Loading custom font

Text(

'Custom Font Text', style: TextStyle( fontFamily: 'Font Family', fontSize: 16,

),

);

(This font family needs to be added to the pubspec.yaml file to be able to be used.)

## WIDGETS AND PROPERTIES:

The widgets we focussed in this lab are:

- Images- We added the Uber logo image on the page.
- Icons- We added the 4 icons on the page each for Home, Services, Activity and Account.

## CODE:

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

import 'services.dart';
import 'activity.dart';
import 'account.dart';
import 'map_page.dart'; // Import the MapPage

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

```

@override
State<HomePage> createState() => _HomePageState();
}

class _HomePageState extends State<HomePage> {
  int _selectedIndex = 0;

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        title: Text(
          'Uber',
          style: TextStyle(
            color: Colors.black,
            fontWeight: FontWeight.bold,
          ),
        ),
        backgroundColor: Colors.white,
      ),
      backgroundColor: Colors.white,
      body: Container(
        color: Colors.white,
        child: Column(
          children: [
            Container(
              padding: EdgeInsets.all(16),
              color: Colors.white,
              child: TextField(
                onTap: () {
                  Navigator.push(context, MaterialPageRoute(builder: (context) =>
MapPage()));
                },
                decoration: InputDecoration(
                  hintText: 'Enter pickup point',
                  prefixIcon: Icon(Icons.search, color: Colors.black),
                  border: OutlineInputBorder(
                    borderRadius: BorderRadius.circular(20.0),
                  ),
                ),
              ),
            ),
          ],
        ),
      ),
    );
  }
}

```

```

    ),
  ),
  Container(
    padding: EdgeInsets.symmetric(vertical: 8.0),
    color: Colors.white,
    child: Row(
      mainAxisAlignment: MainAxisAlignment.spaceEvenly,
      children: [
        buildIcon(
          icon: FontAwesomeIcons.car,
          label: 'Trip',
          onTap: () {
            _onItemTapped(0); // Navigate to Home page
          },
        ),
        buildIcon(
          icon: FontAwesomeIcons.route,
          label: 'Rentals',
          onTap: () {
            _onItemTapped(1); // Navigate to Services page
          },
        ),
        buildIcon(
          icon: FontAwesomeIcons.users,
          label: 'Group ride',
          onTap: () {
            _onItemTapped(2); // Navigate to Activity page
          },
        ),
        buildIcon(
          icon: FontAwesomeIcons.carAlt,
          label: 'Intercity',
          onTap: () {
            _onItemTapped(3); // Navigate to Account page
          },
        ),
      ],
    ),
  ),
  SizedBox(

```

```

        height: 20, // Add desired height between widgets
      ),
      SizedBox(
        height: 120, // Adjust the height according to your content
        child: SingleChildScrollView(
          scrollDirection: Axis.horizontal, // Allow horizontal scrolling if needed
          child: Container(
            width: MediaQuery.of(context).size.width - 40, // Adjust width to fit the
screen
            margin: EdgeInsets.symmetric(horizontal: 20),
            padding: EdgeInsets.all(20),
            decoration: BoxDecoration(
              borderRadius: BorderRadius.circular(20),
              gradient: LinearGradient(
                colors: [Colors.red, Colors.orange], // Adjust gradient colors as
needed
                begin: Alignment.centerLeft,
                end: Alignment.centerRight,
              ),
              boxShadow: [
                BoxShadow(
                  color: Colors.grey.withOpacity(0.5),
                  spreadRadius: 5,
                  blurRadius: 7,
                  offset: Offset(0, 3), // changes position of shadow
                ),
              ],
            ),
            child: Column(
              crossAxisAlignment: CrossAxisAlignment.start,
              children: [
                Text(
                  "READY? Then let's roll!",
                  textAlign: TextAlign.left,
                  style: TextStyle(fontSize: 24, fontWeight: FontWeight.bold, color:
Colors.white),
                ),
                // SizedBox(height: 8),
                // Text(
                //   "Tap the icons below to get started",

```

```

        // textAlign: TextAlign.left,
        // style: TextStyle(fontSize: 16, color: Colors.white),
        // ),
      ],
    ),
  ),
),
],
),
),
bottomNavigationBar: BottomNavigationBar(
  items: <BottomNavigationBarItem>[
    buildNavBarItem(Icons.home, 'Home'),
    buildNavBarItem(Icons.directions_car, 'Services'),
    buildNavBarItem(Icons.notifications, 'Activity'),
    buildNavBarItem(Icons.person, 'Account'),
  ],
  currentIndex: _selectedIndex,
  selectedItemColor: Colors.black,
  unselectedItemColor: Colors.grey[600],
  onTap: _onItemTapped,
  type: BottomNavigationBarType.fixed,
  backgroundColor: Colors.white,
),
);
}

```

Widget **buildIcon**({required IconData icon, required String label, required VoidCallback onTap}) {

```

  return GestureDetector(
    onTap: onTap,
    child: Container(
      width: MediaQuery.of(context).size.width * 0.2,
      height: MediaQuery.of(context).size.width * 0.2,
      decoration: BoxDecoration(
        color: Colors.grey[200], // Change background color
        borderRadius: BorderRadius.circular(10),
        boxShadow: [
          BoxShadow(

```

```

        color: Colors.grey.withOpacity(0.5),
        spreadRadius: 2,
        blurRadius: 5,
        offset: Offset(0, 3), // changes position of shadow
      ),
    ],
  ),
  child: Column(
    mainAxisAlignment: MainAxisAlignment.center,
    children: [
      Icon(
        icon,
        color: Colors.black87, // Change icon color
        size: 40,
      ),
      SizedBox(height: 8),
      Text(
        label,
        style: TextStyle(color: Colors.black87, fontSize: 16, fontWeight:
FontWeight.bold), // Change text color
      ),
    ],
  ),
);
}

BottomNavigationBarItem buildNavBarItem(IconData icon, String label) {
  return BottomNavigationBarItem(
    icon: Icon(icon, color: Colors.black),
    label: label,
  );
}

void _onItemTapped(int index) {
  setState(() {
    _selectedIndex = index;
  });

  // Handle navigation

```

```

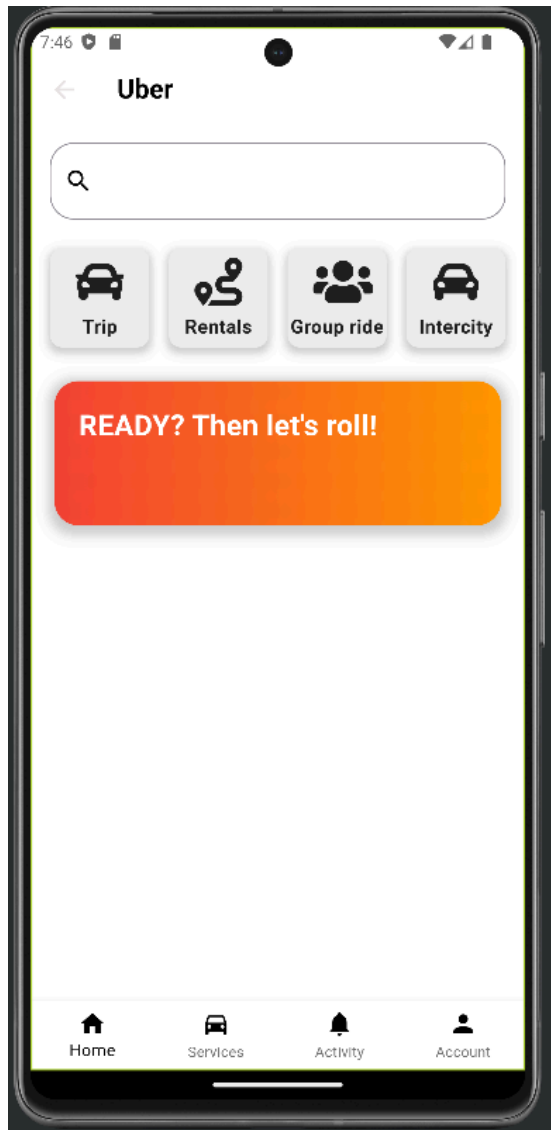
switch (index) {
  case 0:
    // Navigate to Home page
    break;
  case 1:
    // Navigate to Services page
    Navigator.push(context, MaterialPageRoute(builder: (context) =>
ServicesPage()));
    break;
  case 2:
    // Navigate to Activity page
    Navigator.push(context, MaterialPageRoute(builder: (context) =>
ActivityPage()));
    break;
  case 3:
    // Navigate to Account page
    Navigator.push(context, MaterialPageRoute(builder: (context) =>
ProfilePage()));
    break;
  default:
    break;
}
}
}

void main() {
  runApp(MaterialApp(
    home: HomePage(),
    theme: ThemeData(
      appBarTheme: AppBarTheme(
        backgroundColor: Colors.white,
        titleTextStyle: TextStyle(color: Colors.black),
        iconTheme: IconThemeData(color: Colors.black),
      ),
    ),
  ));
}

```



**OUTPUT:**



## **CONCLUSION:**

1. Learnt about fonts, images and icons in flutter.
2. Faced errors in adding images as the images were not imported properly.