

EXP 3

AIM: To include icons, images, fonts in Flutter app

THEORY:

Including icons, images, and custom fonts in a Flutter app is a common requirement to enhance the visual appeal and functionality of the application. Let's discuss each of these elements:

1. Icons:

Icons in Flutter are typically represented by the Icon widget. Flutter provides a set of built-in icons through the Icons class, but you can also use custom icons or those from external icon packs.

How to Include Icons:

Built-in Icons:

Icon(Icons.star);

Custom Icons:

Flutter allows you to use custom icons in various formats, such as SVG or PNG. You can use the Image.asset or Image.network widget to display custom icons.

2. Images:

Displaying images is a crucial part of app development. Flutter supports various image formats, including PNG, JPEG, GIF, and WebP.

How to Include Images:

Asset Images:

- Place your images in the assets folder of your project, and then use the Image.asset widget to display them.

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

3. Fonts:

Custom fonts allow you to create a unique typographic style for your app. Flutter supports TrueType (TTF) and OpenType (OTF) fonts.

How to Include Fonts:

Adding Fonts to pubspec.yaml:

Add your font files to the fonts section of the pubspec.yaml file.

flutter:

 fonts:

 - family: MyCustomFont

 fonts:

 - asset: assets/fonts/my_custom_font.ttf

Using Custom Fonts:

Apply custom fonts using the Text widget.

```
Text(  
  'Hello, World!',  
  style: TextStyle(  
    fontFamily: 'MyCustomFont',  
    fontSize: 20,  
  ),  
);
```

CODE:

// sidebar.dart

```
import 'package:flutter/material.dart';  
  
class SlimSidebar extends StatelessWidget {  
  final Widget child;  
  
  const SlimSidebar({required this.child, super.key});  
  
  @override  
  Widget build(BuildContext context) {  
    return Row(  
      children: [  
        // Slim Sidebar  
        Container(  
          width: 80,  
          color: Colors.grey[900],  
          child: ListView(  
            children: [  
              ChannelTile(imagePath:  
'assets/images/profile_image1.jpg'),  
              ChannelTile(imagePath:  
'assets/images/banner1.jpg'),  
              ChannelTile(imagePath:  
'assets/images/profile_image.jpg'),  
  
              // Add more ChannelTiles as needed  
            ],  
          ),  
        ],  
    );  
  
    // Main Content  
    Expanded(  
      child: child,  
    ),  
  ],  
);
```

```

    ],
  );
}
}

class ChannelTile extends StatelessWidget {
  final String imagePath;

  const ChannelTile({required this.imagePath, super.key});

  @override
  Widget build(BuildContext context) {
    return ListTile(
      contentPadding: EdgeInsets.zero,
      title: ClipOval(
        child: Container(
          height: 60,
          width: 60,
          decoration: BoxDecoration(
            shape: BoxShape.circle, // Ensures a circular shape
            image: DecorationImage(
              image: AssetImage(imagePath),
              fit: BoxFit.cover,
            ),
          ),
        ),
      ),
    );
  }
}

```

```

//pubspec.yaml
name: discord
description: A new Flutter project.

version: 1.0.0+1

environment:
  sdk: ">=3.0.0 <4.0.0"

dependencies:
  flutter:
    sdk: flutter

dev_dependencies:
  flutter_test:

```

```

    sdk: flutter
    flutter_lints: ^2.0.2

flutter:
  uses-material-design: true
  assets:
    - assets/images/discord_logo1.png
    - assets/images/banner1.jpg
    - assets/images/profile_image1.jpg
    - assets/images/profile_image.jpg
  # fonts:
  #   - family: Schyler
  #     fonts:
  #       - asset: fonts/Schyler-Regular.ttf
  #       - asset: fonts/Schyler-Italic.ttf
  #         style: italic
  #   - family: Trajan Pro
  #     fonts:
  #       - asset: fonts/TrajanPro.ttf
  #       - asset: fonts/TrajanPro_Bold.ttf
  #         weight: 700

```

//home.dart

```

import 'package:flutter/material.dart';
import 'package:discord/pages/sidebar.dart'; // Adjust the
import path based on your project structure // Adjust the import
path based on your project structure
// Adjust the import path based on your project structure

class HomePage extends StatelessWidget {
  const HomePage({super.key});

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      body: SlimSidebar(
        child: SingleChildScrollView(
          child: Column(
            children: [
              // Profile Banner Image
              Container(
                width: MediaQuery.of(context).size.width,
                height: 200,
                decoration: const BoxDecoration(
                  image: DecorationImage(

```

```

        image:
AssetImage('assets/images/banner1.jpg'),
        fit: BoxFit.cover,
    ),
),
child: Stack(
  children: [
    Container(
      // Profile Image
      padding: const EdgeInsets.fromLTRB(10, 50,
10, 10),

      alignment: Alignment.bottomLeft,
      child: const CircleAvatar(
        backgroundImage:
AssetImage('assets/images/profile_image1.jpg'),
        radius: 40,
      ),
    ),

    // Settings Icon
    Positioned(
      top: 10,
      right: 10,
      child: Container(
        decoration: BoxDecoration(
          color: Colors.grey[400],
          shape: BoxShape.circle,
        ),
        child: IconButton(
          icon: const Icon(Icons.settings,
color: Colors.white),
          onPressed: () {},
        ),
      ),
    ),
  ],
),
),

// Bio Section
Container(
  margin: const EdgeInsets.all(16.0),
  padding: const EdgeInsets.all(16.0),
  decoration: BoxDecoration(
    color: const Color.fromARGB(255, 39, 38, 38),
    borderRadius: BorderRadius.circular(10.0),

```

```

    ),
    alignment: Alignment.centerLeft,
    child: Column(
      crossAxisAlignment: CrossAxisAlignment.start,
      children: [
        const Text(
          'Susmita Santi',
          style: TextStyle(
            fontSize: 20,
            color: Colors.white,
            fontWeight: FontWeight.bold,
          ),
        ),
        const SizedBox(height: 4),
        const Text(
          'susmitasanti04',
          style: TextStyle(
            fontSize: 16,
            color: Colors.grey,
          ),
        ),
        const SizedBox(height: 10),
        const Text(
          'This is a short bio of myself. It like
listening to music.',
          style: TextStyle(
            fontSize: 16,
            color: Colors.grey,
          ),
        ),
        const SizedBox(height: 10),
        Row(
          children: [
            Expanded(
              child: ElevatedButton.icon(
                onPressed: () {},
                icon: const Icon(Icons.edit),
                label: const Text('Edit Status'),
                style: ElevatedButton.styleFrom(
                  backgroundColor:
Colors.grey.shade300,
                  foregroundColor: Colors.black,
                ),
              ),
            const SizedBox(width: 10),
            Expanded(

```

```
        child: ElevatedButton.icon(
          onPressed: () {},
          icon: const Icon(Icons.person),
          label: const Text('Edit Profile'),
          style: ElevatedButton.styleFrom(
            backgroundColor:
Colors.grey.shade300,
              foregroundColor: Colors.black,
          ),
        ),
      ],
    ),
  ],
),
),

// About Me Section
Container(
  margin: const EdgeInsets.only(
    left: 16.0, right: 16.0, top: 8.0, bottom:
16.0),
  padding: const EdgeInsets.all(16.0),
  decoration: BoxDecoration(
    color: const Color.fromARGB(255, 39, 38, 38),
    borderRadius: BorderRadius.circular(10.0),
  ),
  alignment: Alignment.centerLeft,
  child: const Column(
    crossAxisAlignment: CrossAxisAlignment.start,
    children: [
      Text(
        'About Me',
        style: TextStyle(
          fontSize: 20,
          color: Colors.grey,
        ),
      ),
      SizedBox(height: 10),
      Text(
        'This is a short bio of myself. It like listening to music.',
        style: TextStyle(
          fontSize: 16,
          color: Colors.grey,
        ),
      ),
    ],
  ),
```

```

        SizedBox(height: 10),
      ],
    ),
  ),

  // Picture and Its Description Section
  Container(
    margin: const EdgeInsets.only(
      left: 16.0, right: 16.0, top: 8.0, bottom:
16.0),

    padding: const EdgeInsets.all(16.0),
    decoration: BoxDecoration(
      color: const Color.fromARGB(255, 39, 38, 38),
      borderRadius: BorderRadius.circular(10.0),
    ),
    child: Row(
      crossAxisAlignment: CrossAxisAlignment.start,
      children: [
        // Picture
        Container(
          width: 100.0,
          height: 100.0,
          decoration: BoxDecoration(
            image: const DecorationImage(
              image:
 AssetImage('assets/images/banner1.jpg'),
              fit: BoxFit.cover,
            ),
            borderRadius:
BorderRadius.circular(8.0),
          ),
        ),

        const SizedBox(width: 16.0),

        // Picture Description
        const Expanded(
          child: Column(
            crossAxisAlignment:
CrossAxisAlignment.start,
            children: [
              Text(
                'Picture Title',
                style: TextStyle(
                  fontSize: 18.0,
                  fontWeight: FontWeight.bold,
                  color: Colors.white,

```



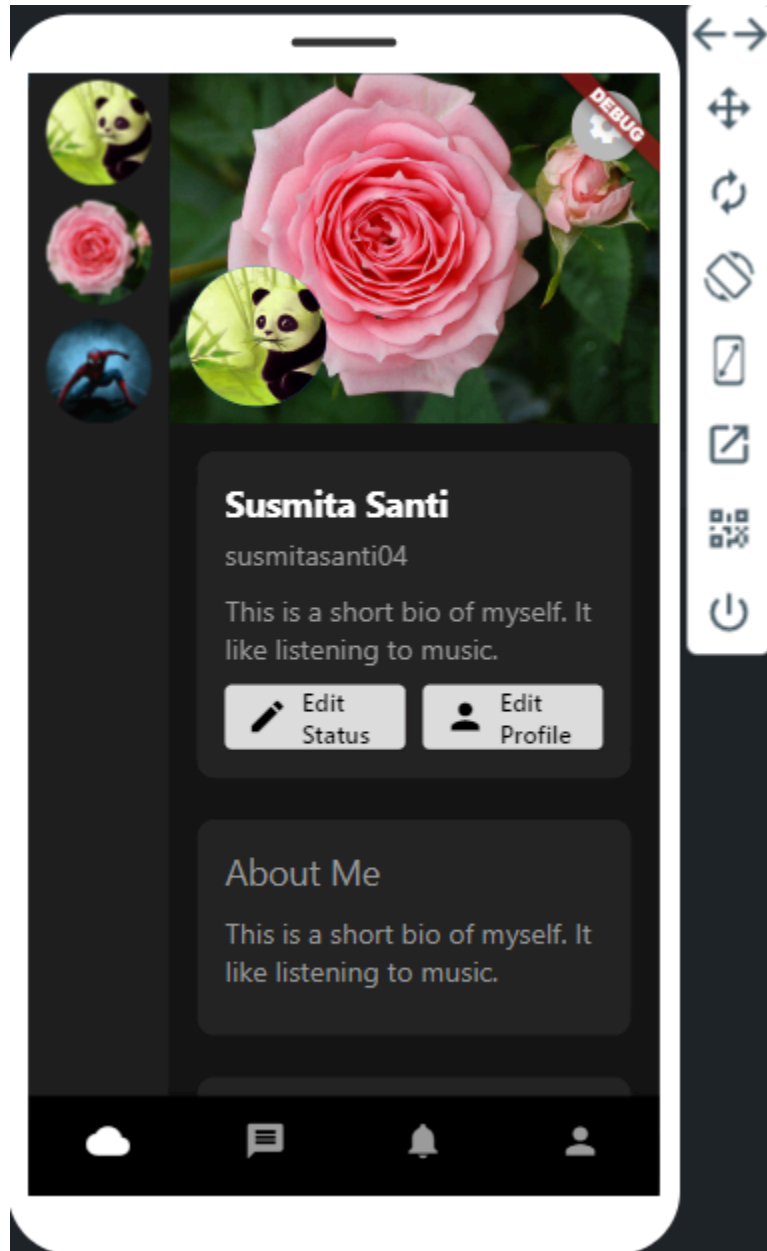
```

        ),
        SizedBox(height: 8.0),
        Text(
            'The description of Rose in the
corresponding picture.',
            style: TextStyle(
                fontSize: 16.0,
                color: Colors.white,
            ),
        ),
    ],
),
],
),
),
),
),
),
),
),
),
),
bottomNavigationBar: BottomNavigationBar(
    type: BottomNavigationBarType.fixed,
    backgroundColor: Colors.black87,
    selectedItemColor: Colors.white,
    unselectedItemColor: Colors.grey,
    showSelectedLabels: false,
    showUnselectedLabels: false,
    items: const [
        BottomNavigationBarItem(
            icon: Icon(Icons.cloud),
            label: 'Servers',
        ),
        BottomNavigationBarItem(
            icon: Icon(Icons.message),
            label: 'Messages',
        ),
        BottomNavigationBarItem(
            icon: Icon(Icons.notifications),
            label: 'Notifications',
        ),
        BottomNavigationBarItem(
            icon: Icon(Icons.person),
            label: 'You',
        ),
    ],
),
),

```

```
}  
}  
};
```

OUTPUT



CONCLUSION:

In conclusion, enhancing the visual appeal and functionality of a Flutter app involves incorporating icons, images, and custom fonts.

Icons: Utilize the Icon widget for built-in icons and explore custom icons using various formats.

Images: Display images with the Image.asset widget for local assets or Image.network for network images.

Fonts: Include custom fonts in the pubspec.yaml file and apply them using the TextStyle property in the Text widget.