EXPERIMENT NO: - 03

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

Theory:

Flutter is a versatile open-source UI framework, which allows developers to build natively compiled applications for mobile, web, and desktop platforms from a single codebase. One of the key strengths of Flutter is its flexibility in creating highly customizable UIs. This practical focuses on incorporating essential visual elements—icons, images, and custom fonts—into a Flutter application. These elements enhance the visual appeal and usability of the app, providing an engaging experience for users.

A flutter app when built has both assets (resources) and code. Assets are available and deployed during runtime. The asset is a file that can include static data, configuration files, icons, and images. The Flutter app supports many image formats, such as JPEG, WebP, PNG, GIF, animated WebP/GIF, BMP, and WBMP.

Visual elements play a significant role in app development.

- Enhanced User Experience: Images and icons make your app visually appealing and user- friendly.

- Information Conveyance: They convey information quickly and intuitively. A well-chosen icon can replace lengthy text.

- Branding: Custom icons and images reinforce your app's branding, making it memorable.

- Adding Icons in Flutter

  Flutter provides built-in material design icons through the Icons class. Custom icons can also be added using third-party packages such as flutter_launcher_icons and font_awesome_flutter.

  ```
  Icon(
   Icons.home,
   size: 40,
  );
  ```

- Adding Images in Flutter

  Flutter supports images from three sources:

  1. Assets (Stored locally in the project)
     - Place the image inside the assets/images folder in the project.
     - Declare the image in pubspec.yaml
       flutter:
         assets:
           - assets/images/sample.png

     - Display the image in the app

       Image.asset('assets/images/sample.png'

       );

  2. Network (Fetched from the internet)

     Displaying images from the internet or network is very simple. Flutter provides a built-in method Image.network to work with images from a URL. The Image.network method also allows you to use some optional properties, such as height, width, color, fit, and many more.

     Image.network('https://example.com/sample.jpg');

  3. Memory or File (Stored on the device)

- Adding Custom Fonts in Flutter

  By default, Flutter uses the Roboto font, but custom fonts can be added for a unique UI.

     - Download the font and place it in the assets/fonts/ folder.
     - Declare the font in pubspec.yaml
     - Use the font in the app
       Text(
        'Custom Font Example',
        style: TextStyle(fontFamily: 'CustomFont', fontSize: 24),
       );

Code:

1. Landing_page.dart

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

import 'sign_in_page.dart';

class LandingPage extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return Scaffold(
      backgroundColor: Colors.white,
      body: Center(
        child: SingleChildScrollView( //
Prevents overflow
          child: Padding(
            padding:
EdgeInsets.symmetric(horizontal: 20), //
Adds margin from edges
            child: Column(
              mainAxisAlignment:
MainAxisAlignment.center,
              crossAxisAlignment:
CrossAxisAlignment.center, // Centers
content
              children: [
                Align(
                  alignment: Alignment.centerLeft,
                  child:
Image.asset("assets/linkedin_logo.png",
height: 120),
                ),
                SizedBox(height: 5),
                SizedBox(
                  width: double.infinity,
  child:
  Image.asset("assets/on_boarding_1.jpg",
  height: 400, fit: BoxFit.cover),
                ),
const SizedBox(
                  height: 10,
                ),
                Text(
                  'Find and land your next job',
                  textAlign: TextAlign.center,
                  style: TextStyle(fontSize: 18,
fontWeight: FontWeight.bold),
                ),
                SizedBox(height: 40),
                SizedBox(
                  width: double.infinity,
child: ElevatedButton(
                  onPressed: () {
                    Navigator.push(
                      context,

                      MaterialPageRoute(builder: (context) =>
SignUpPage()),
                    );
                  },
                  style:
ElevatedButton.styleFrom(
                    backgroundColor: Colors.blue,
                    padding:
EdgeInsets.symmetric(horizontal: 50,
vertical: 15),
                  ),
                  child: Text('Join now', style:
TextStyle(color: Colors.white)),
                ),
                ),
                SizedBox(height: 15),

                SizedBox(
                  width: double.infinity,
  child: OutlinedButton.icon(
                    onPressed: () {},
                    icon:
  Image.asset('assets/google_logo.png',
  height: 30),
                    label: Text('Join with Google'),
                    style:
OutlinedButton.styleFrom(
                      padding:
EdgeInsets.symmetric(vertical: 15),
                    ),
                  ),
                ),
                SizedBox(height: 15),
                TextButton(
                  onPressed: () {
                    Navigator.push(
                      context,
                      MaterialPageRoute(builder:
(context) => SignInPage()),
                    );
                  },
                  child: Text('Sign In', style:
TextStyle(color: Colors.blue)),
                ),
              ],
            ),
          ),
        ),
      ),
    );
  }
}
```

2. Network_page.dart

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

class NetworkPage extends
StatelessWidget {
  final List<Map<String, dynamic>>
connections = [
    {
      "name": "John Doe",
      "job": "Flutter Developer & ...",
      "connections": "13 mutual connections",
      "image":
"https://media.istockphoto.com/id/14378168
97/photo/business-woman-manager-or-
human-resources-portrait-for-career-
success-company-we-are-
hiring.jpg?s=612x612&w=0&k=20&c=tyLvtz
utRh22j9GqSGI33Z4HpIwv9vL_MZw_xOE1
9NQ="
    },
    {
      "name": "Carig C. Watson",
      "job": "Senior Software Eng...",
      "connections": "22 mutual connections",
      "image":
"https://www.shutterstock.com/image-
photo/head-shot-portrait-close-smiling-
600nw-1714666150.jpg"
    },
    {
      "name": "Diana Joe",
      "job": "UX/UI Researcher & ...",
      "connections": "52 mutual connections",
      "image":
"https://img.fixthephoto.com/blog/images/ga
llery/news_preview_mob_image__preview_
11368.png"
    },

    {
      "name": "Stephan Covey",
      "job": "Android Developer a...",
      "connections": "13 mutual connections",
      "image":
"https://www.shutterstock.com/image-
photo/profile-picture-smiling-successful-
young-260nw-2040223583.jpg"
    },
    {
      "name": "John Doe",
      "job": "Flutter Developer & ...",
      "connections": "13 mutual connections",
      "image":
"https://media.istockphoto.com/id/14378168
97/photo/business-woman-manager-or-
human-resources-portrait-for-career-
success-company-we-are-
hiring.jpg?s=612x612&w=0&k=20&c=tyLvtz
utRh22j9GqSGI33Z4HpIwv9vL_MZw_xOE1
9NQ="
    },
    {
      "name": "Carig C. Watson",
      "job": "Senior Software Eng...",
      "connections": "22 mutual connections",
      "image":
"https://www.shutterstock.com/image-
photo/head-shot-portrait-close-smiling-
600nw-1714666150.jpg"
    },
    {
      "name": "Diana Joe",
      "job": "UX/UI Researcher & ...",
      "connections": "52 mutual connections",
      "image":
"https://img.fixthephoto.com/blog/images/ga
llery/news_preview_mob_image__preview_
11368.png"
    },
    {
      "name": "Stephan Covey",
      "job": "Android Developer a...",
      "connections": "13 mutual connections",
      "image":
"https://www.shutterstock.com/image-
photo/profile-picture-smiling-successful-
young-260nw-2040223583.jpg"
    },
    {
      "name": "John Doe",
      "job": "Flutter Developer & ...",
      "connections": "13 mutual connections",
      "image":
"https://media.istockphoto.com/id/14378168
97/photo/business-woman-manager-or-
human-resources-portrait-for-career-
success-company-we-are-
hiring.jpg?s=612x612&w=0&k=20&c=tyLvtz
utRh22j9GqSGI33Z4HpIwv9vL_MZw_xOE1
9NQ="
    },
```
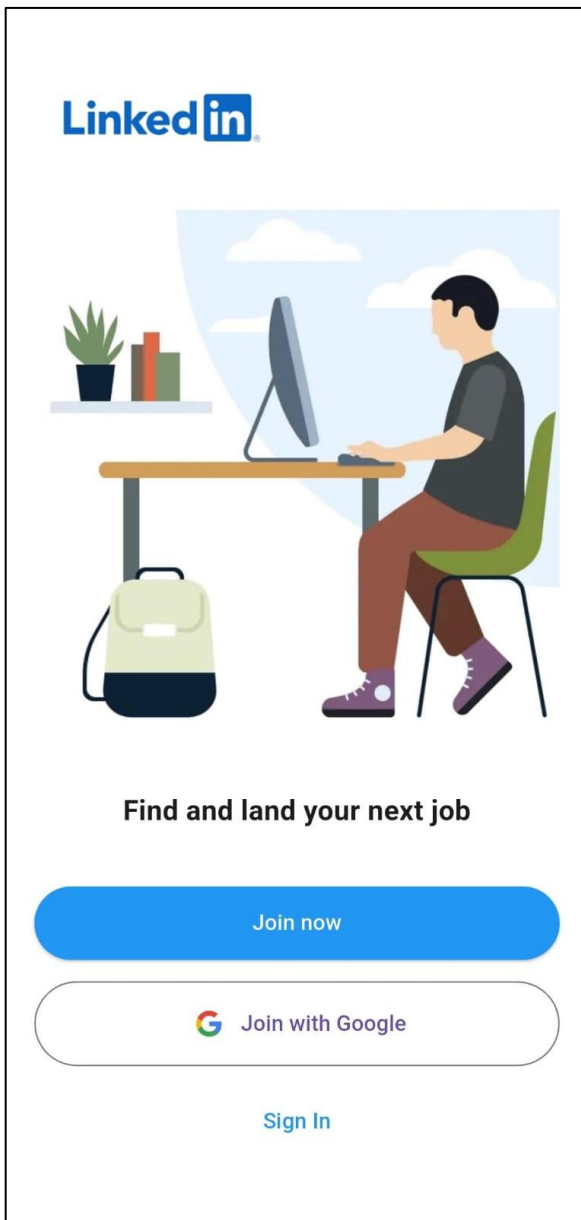
```dart
  {
    "name": "Carig C. Watson",
    "job": "Senior Software Eng...",
    "connections": "22 mutual connections",
    "image":
"https://www.shutterstock.com/image-
photo/head-shot-portrait-close-smiling-
600nw-1714666150.jpg"
  },

];
@override
Widget build(BuildContext context) {
  return Scaffold(
    appBar: AppBar(
      backgroundColor: Colors.white,
      elevation: 0,
      title: TextField(
        decoration: InputDecoration(
          hintText: "Connect with people",

          border: InputBorder.none,
        ),
      ),
    ),
    body: Padding(
      padding: const EdgeInsets.all(8.0),
      child: GridView.builder(
        gridDelegate:
SliverGridDelegateWithFixedCrossAxisCou
nt(
          crossAxisCount: 2,
          crossAxisSpacing: 8.0,
          mainAxisSpacing: 8.0,
          childAspectRatio: 0.8,
        ),
  itemCount: connections.length,
        itemBuilder: (context, index) {
          return Card(
            shape: RoundedRectangleBorder(
              borderRadius:
BorderRadius.circular(10),
            ),
            child: Column(
              crossAxisAlignment:
CrossAxisAlignment.center,
              children: [
                SizedBox(height: 16),

ClipRRect(
                  borderRadius:
BorderRadius.circular(50),
                  child: Image.network(
                    connections[index]['image'],
                    height: 80,
                    width: 80,
                    fit: BoxFit.cover,
                  ),
                ),
                SizedBox(height: 8),
                Text(
                  connections[index]['name'],
                  style: TextStyle(fontWeight:
FontWeight.bold, fontSize: 16),
                ),
Padding(
                  padding: const
EdgeInsets.symmetric(horizontal: 8.0),
                  child: Text(
                    connections[index]['job'],
                    textAlign: TextAlign.center,
                    style: TextStyle(fontSize: 12,
color: Colors.grey),
                  ),
                ),
                SizedBox(height: 4),
                Text(
connections[index]['connections'],
                  style: TextStyle(fontSize: 12,
color: Colors.grey),
                ),
                Spacer(),
                ElevatedButton(
                  style:
ElevatedButton.styleFrom(
                    backgroundColor:
Colors.white,
                    side: BorderSide(color:
Colors.blue),
                    shape:
RoundedRectangleBorder(
                      borderRadius:
BorderRadius.circular(20),
                    ),
                  ),
                  onPressed: () {},
                  child: Text("Connect", style:
TextStyle(color: Colors.blue)),
                ),
                SizedBox(height: 8),
              ],
            ),
          );
        },
      ),
    ),
  );
}
}
```
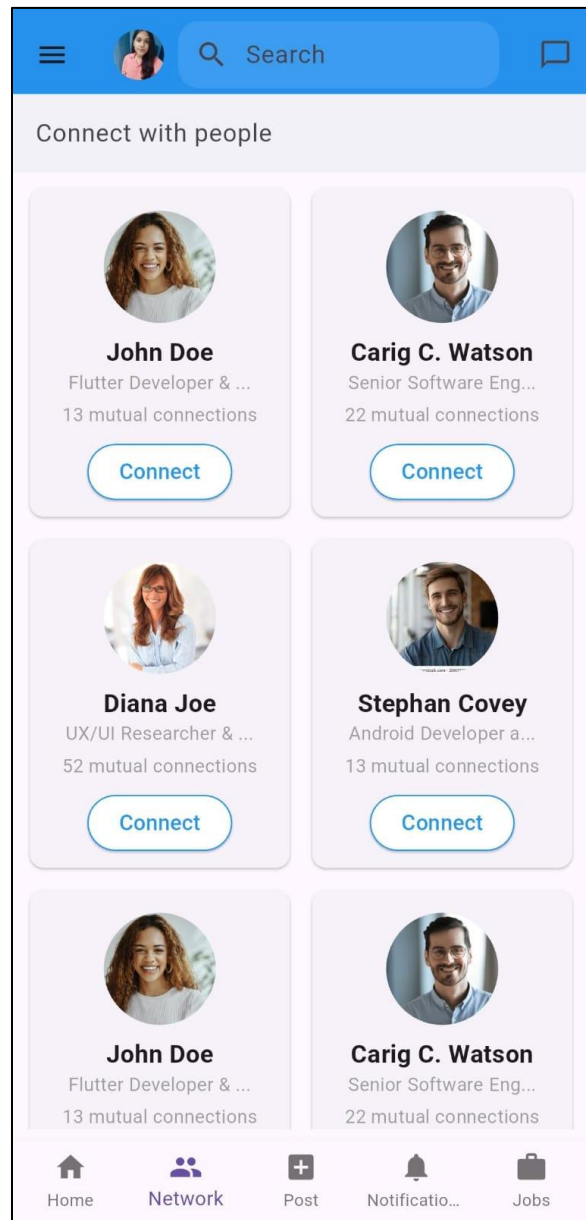
Pubspec.yaml

assets:
  - assets/sannidhi_illusions.jpg
  - assets/linkedin_logo.png
  - assets/google_logo.png
  - assets/on_boarding_1.jpg
  - assets/internship.jpg

Output:

Landing page

Network page