

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

EXPERIMENT NO: - 03

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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 wellchosen 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:

welcome_page.dart:

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

class WelcomePage extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return Scaffold(
      backgroundColor: Colors.blue.shade700, // Matches the image background
      body: SafeArea(
        child: Column(
          children: [
            Align(
              alignment: Alignment.topLeft,
              child: Padding(
                padding: EdgeInsets.all(16),
                child: Icon(Icons.settings, color: Colors.white, size: 28), // Settings Icon
              ),
            ),
            Spacer(),
            Text(
              'zoom',
              style: TextStyle(fontSize: 40, color: Colors.white, fontWeight: FontWeight.bold),
            ),
            Text(
              'Workplace',
              style: TextStyle(fontSize: 28, color: Colors.white),
            ),
            Spacer(),
            Container(
              width: double.infinity,
              padding: EdgeInsets.symmetric(horizontal: 20, vertical: 30),
              decoration: BoxDecoration(
                color: Colors.white,
                borderRadius: BorderRadius.only(topLeft: Radius.circular(30), topRight: Radius.circular(30)),
                boxShadow: [BoxShadow(color: Colors.black12, spreadRadius: 1, blurRadius: 10)],
              ),
              child: Column(
                mainAxisAlignment: MainAxisAlignment.min,
                children: [
                  Text('Welcome', style: TextStyle(fontSize: 24, fontWeight: FontWeight.bold)),
                  SizedBox(height: 5),
                ],
              ),
            ),
          ],
        ),
      ),
    );
  }
}
```

```
Text('Get started with your account', style: TextStyle(fontSize: 16, color: Colors.grey)),
  SizedBox(height: 30),
  _buildButton(context, 'Join a meeting', Colors.blue, Colors.white, () {}),
  SizedBox(height: 15),
  _buildButton(context, 'Sign up', Colors.grey.shade300, Colors.black, () {
    Navigator.pushNamed(context, '/signup');
  }),
  SizedBox(height: 10),
  _buildButton(context, 'Sign in', Colors.grey.shade300, Colors.black, () {
    Navigator.pushNamed(context, '/login');
  }),
],
),
),
],
),
),
);
}
```

```
Widget _buildButton(BuildContext context, String text, Color bgColor, Color textColor, VoidCallback
onPressed) {
  return SizedBox(
    width: double.infinity,
    child: ElevatedButton(
      onPressed: onPressed,
      style: ElevatedButton.styleFrom(
        backgroundColor: bgColor,
        padding: EdgeInsets.symmetric(vertical: 15),
        shape: RoundedRectangleBorder(borderRadius: BorderRadius.circular(10)),
      ),
      child: Text(text, style: TextStyle(fontSize: 18, color: textColor)),
    ),
  );
}
```

Home_page.dart:

```
import 'package:flutter/material.dart';
import 'new_meeting_page.dart';
import 'join_meeting_page.dart';
import 'schedule_meeting_page.dart';

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

class _HomePageState extends State<HomePage> {
  bool isDarkMode = false;

  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      theme: isDarkMode ? ThemeData.dark() : ThemeData.light(),
      debugShowCheckedModeBanner: false,
      home: Scaffold(
        appBar: AppBar(
          title: Text("Meet & Chat"),
          actions: [
            IconButton(
              icon: Icon(isDarkMode ? Icons.light_mode : Icons.dark_mode),
              onPressed: () => setState(() => isDarkMode = !isDarkMode),
            ),
          ],
        ),
        body: Padding(
          padding: EdgeInsets.all(20),
          child: Column(
            children: [
              Row(
                mainAxisAlignment: MainAxisAlignment.spaceAround,
                children: [
                  _buildButton(Icons.videocam, "New Meeting", () {
                    Navigator.push(context, MaterialPageRoute(builder: (context) =>
                      NewMeetingPage()));
                  },

```

```

        _buildButton(Icons.add, "Join", () {
          Navigator.push(context, MaterialPageRoute(builder: (context) =>
JoinMeetingPage()));
        }),
        _buildButton(Icons.calendar_today, "Schedule", () {
          Navigator.push(context, MaterialPageRoute(builder: (context) =>
ScheduleMeetingPage()));
        }),
        _buildButton(Icons.screen_share, "Share Screen"),
      ],
    ),
    SizedBox(height: 30),
    Text("Find People and Start Chatting", style: TextStyle(fontSize: 18)),
    SizedBox(height: 10),
    ElevatedButton(onPressed: () {}, child: Text("Add Contacts")),
  ],
),
),
bottomNavigationBar: BottomNavigationBar(
  items: [
    BottomNavigationBarItem(icon: Icon(Icons.chat), label: "Meet & Chat"),
    BottomNavigationBarItem(icon: Icon(Icons.message), label: "Messages"),
    BottomNavigationBarItem(icon: Icon(Icons.contacts), label: "Contacts"),
    BottomNavigationBarItem(icon: Icon(Icons.more_horiz), label: "More"),
  ],
),
);
}

```

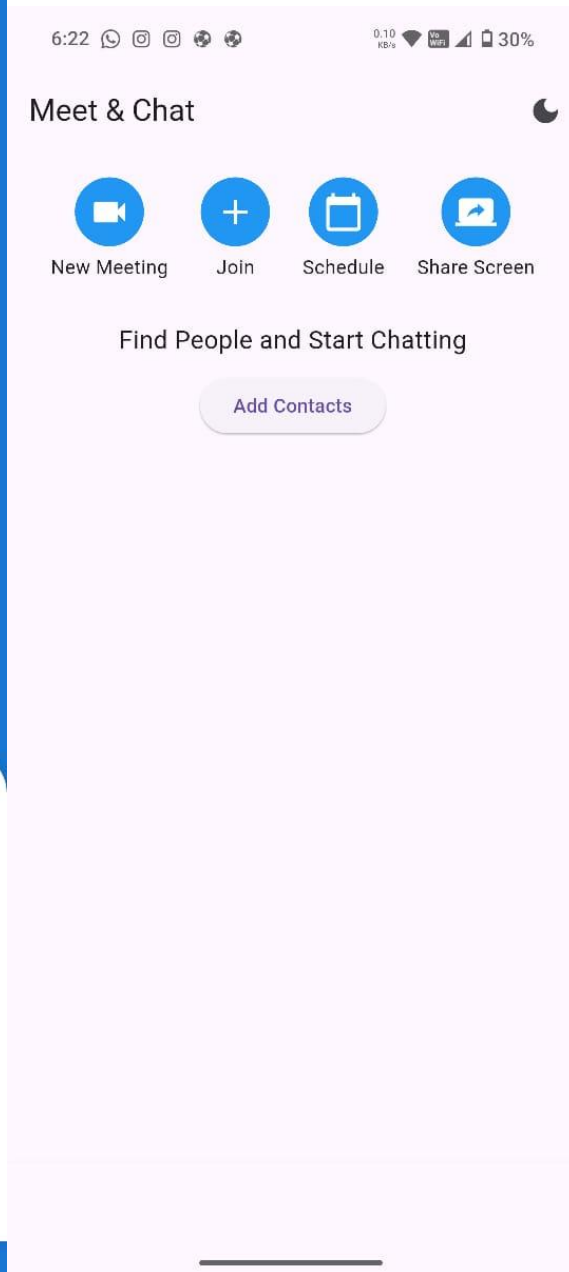
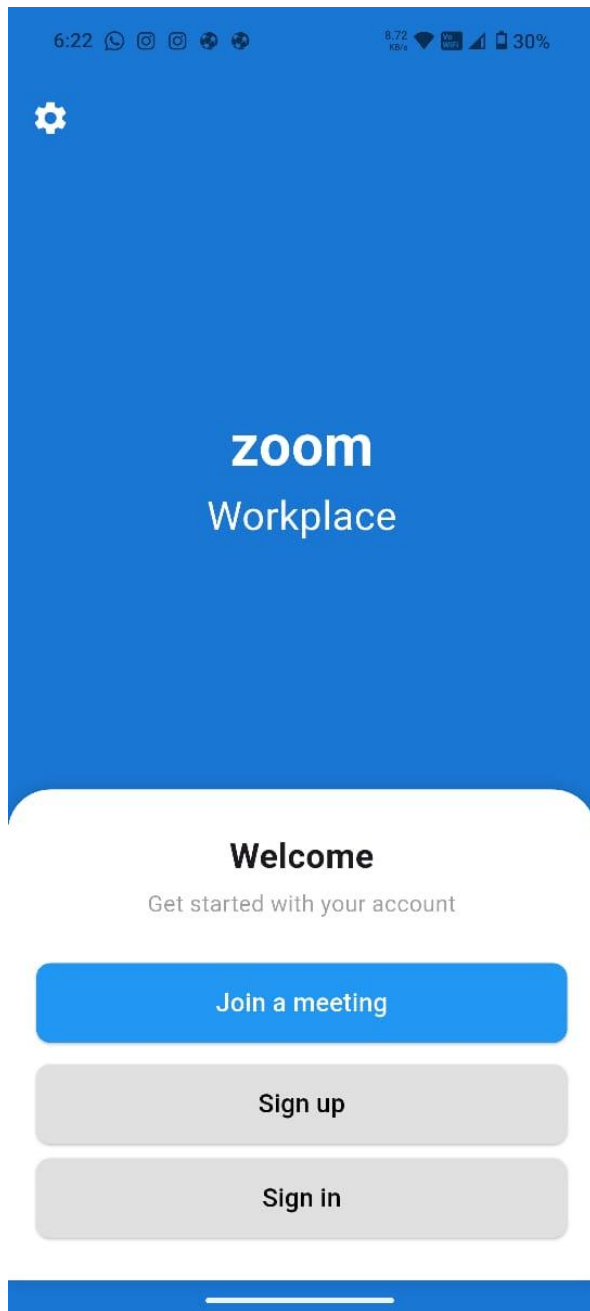
```

Widget _buildButton(IconData icon, String label, [VoidCallback? onTap]) {
  return GestureDetector(
    onTap: onTap,
    child: Column(
      children: [
        CircleAvatar(radius: 25, child: Icon(icon, size: 30, color: Colors.white), backgroundColor:
Colors.blue),
        SizedBox(height: 5),
        Text(label),
      ],
    ),
  );
}

```

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


OUTPUT: -



6:24



0.00 KB/s



← Schedule Meeting

Meeting Title

Starts: 2025-03-04 06:24:10.491243 at 6:24 AM



Select Time



Require Meeting Passcode



Enable Waiting Room



Schedule