

PRACTICAL 3

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

Theory:

Introduction

In Flutter, icons, images, and fonts enhance the app's user interface (UI) and improve usability. Custom icons and images make the app visually appealing, while fonts improve readability and branding.

Concepts Used

1. Icons: Flutter provides built-in [Icons](#) and allows the use of custom icon sets.
2. Images: Images can be loaded from assets, network, or memory.
3. Fonts: Custom fonts are added through [pubspec.yaml](#) to enhance typography.

Implementation in Our App

In our Flutter app, we have:

- Used built-in icons ([Icons.mail](#), [Icons.list](#), etc.) for navigation and actions.
- Added a profile image ([assets/user_profile.png](#)) to display user details.
- Integrated a custom font ([Roboto](#)) to enhance text appearance.
- Converted [HomeScreen](#) into a StatefulWidget to handle UI updates dynamically.

CODE (main.dart)

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

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

```
class MyApp extends StatelessWidget {  
  @override  
  Widget build(BuildContext context) {  
    return MaterialApp(  
      debugShowCheckedModeBanner: false,  
      home: HomeScreen(),  
      theme: ThemeData.dark().copyWith(  
        scaffoldBackgroundColor: Colors.black,  
        primaryColor: Colors.red,  
        textTheme: TextTheme(  
          bodyText1: TextStyle(fontFamily: 'Roboto', color: Colors.white),  
          bodyText2: TextStyle(fontFamily: 'Roboto', color: Colors.grey),
```

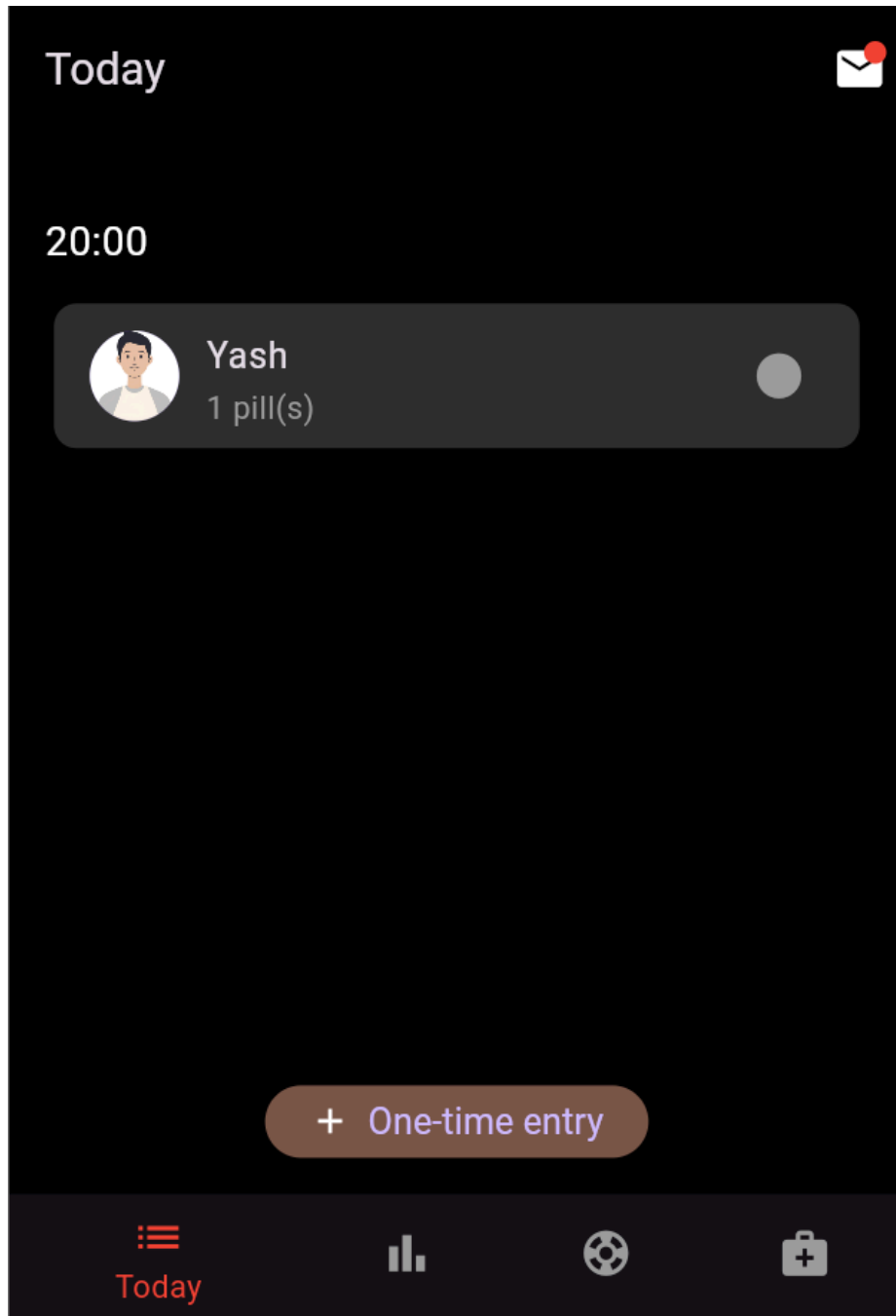
```
    ),  
    ),  
  );  
}  
}  
  
class HomeScreen extends StatefulWidget {  
  @override  
  _HomeScreenState createState() => _HomeScreenState();  
}  
  
class _HomeScreenState extends State<HomeScreen> {  
  int _selectedIndex = 0;  
  
  void _onItemTapped(int index) {  
    setState(() {  
      _selectedIndex = index;  
    });  
  }  
  
  @override  
  Widget build(BuildContext context) {  
    return Scaffold(  
      appBar: AppBar(  
        backgroundColor: Colors.black,  
        elevation: 0,  
        title: Text(  
          'Today',  
          style: TextStyle(fontSize: 20, fontFamily: 'Roboto'),  
        ),  
      actions: [  
        IconButton(  
          icon: Stack(  
            children: [  
              Icon(Icons.mail, color: Colors.white),  
              Positioned(  
                top: 0,  
                right: 0,  
                child: CircleAvatar(  
                  radius: 5,  
                  backgroundColor: Colors.red,  
                ),  
            ),  
          ),  
        ],  
      ),  
    ),  
  ),  
);
```

```
    ),
    onPressed: () {},
  )
],
),
body: Padding(
  padding: const EdgeInsets.all(16.0),
  child: Column(
    crossAxisAlignment: CrossAxisAlignment.start,
    children: [
      SizedBox(height: 20),
      Text(
        '20:00',
        style: TextStyle(
          color: Colors.white,
          fontSize: 18,
          fontFamily: 'Roboto',
        ),
      ),
      SizedBox(height: 10),
      Card(
        color: Colors.grey[850],
        shape: RoundedRectangleBorder(
          borderRadius: BorderRadius.circular(10),
        ),
        child: ListTile(
          leading: CircleAvatar(
            backgroundImage: AssetImage('assets/user_profile.png'),
          ),
          title: Text(
            'Yash',
            style: TextStyle(fontSize: 16, fontFamily: 'Roboto'),
          ),
          subtitle: Text(
            '1 pill(s)',
            style: TextStyle(fontSize: 14, color: Colors.grey),
          ),
          trailing: Icon(Icons.circle, color: Colors.grey),
        ),
      ),
      Spacer(),
      Align(
        alignment: Alignment.bottomCenter,
        child: ElevatedButton.icon(
```

```
        style: ElevatedButton.styleFrom(
          backgroundColor: Colors.brown,
          shape: RoundedRectangleBorder(
            borderRadius: BorderRadius.circular(20),
          ),
          padding: EdgeInsets.symmetric(horizontal: 20, vertical: 10),
        ),
        onPressed: () {},
        icon: Icon(Icons.add, color: Colors.white),
        label: Text(
          'One-time entry',
          style: TextStyle(fontSize: 16, fontFamily: 'Roboto'),
        ),
      ),
    ),
  ],
),
),
bottomNavigationBar: BottomNavigationBar(
  backgroundColor: Colors.black,
  selectedItemColor: Colors.red,
  unselectedItemColor: Colors.grey,
  currentIndex: _selectedIndex,
  onTap: _onItemTapped,
  items: [
    BottomNavigationBarItem(
      icon: Icon(Icons.list),
      label: 'Today',
    ),
    BottomNavigationBarItem(
      icon: Icon(Icons.bar_chart),
      label: 'Progress',
    ),
    BottomNavigationBarItem(
      icon: Icon(Icons.support),
      label: 'Support',
    ),
    BottomNavigationBarItem(
      icon: Icon(Icons.medical_services),
      label: 'Treatment',
    ),
  ],
),
);
```

```
}  
}
```

Screenshot:



Conclusion

We successfully added icons, images, and fonts in our app. Initially, we faced issues loading custom fonts and assets due to incorrect `pubspec.yaml` configuration, which we resolved by properly defining asset paths and font families.