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MAD CS 5-1

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Q.1 You've been hired to create a simple mobile app for a university's internal portal. The app needs

to provide quick navigation and a clean user experience. On the **Home Page**, display a course card with an image and **course name**. When the user taps the card, it should navigate to a **Details Page** using **Navigator.push**, and the course image should smoothly transition using a **Hero animation**. The app should also feature a **BottomNavigationBar** with two tabs: Home and Profile, allowing users to switch between the main content and a simple profile view.

Additionally, implement a Drawer on the Home Page with a vertical menu list using **ListView**, showing three items: **Dashboard**, **Settings**, and **Logout**. Focus on layout, navigation, and basic interactivity. Keep your UI clean and functional.

Ans.

main.dart

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

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

class MyApp extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      title: 'University Portal',
      theme: ThemeData(
        primarySwatch: Colors.blue,
      ),
      home: HomePage(),
    );
  }
}
```

homepage.dart

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

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

```
final List<Widget> _pages = [  
  HomeContent(),  
  ProfilePage(),  
];
```

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

```
@override  
Widget build(BuildContext context) {  
  return Scaffold(  
    appBar: AppBar(title: Text("University Portal")),  
    drawer: Drawer(  
      child: ListView(  
        children: <Widget>[  
          ListTile(title: Text('Dashboard'), onTap: () {}),  
          ListTile(title: Text('Settings'), onTap: () {}),  
          ListTile(title: Text('Logout'), onTap: () {}),  
        ],  
      ),  
    ),  
    body: _pages[_selectedIndex],  
    bottomNavigationBar: BottomNavigationBar(  
      currentIndex: _selectedIndex,
```

```

onTap: _onItemTapped,
items: const <BottomNavigationBarItem>[
  BottomNavigationBarItem(icon: Icon(Icons.home), label: 'Home'),
  BottomNavigationBarItem(icon: Icon(Icons.person), label: 'Profile'),
],
),
);
}
}

```

homecontent.dart

```

class HomeContent extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return Padding(
      padding: const EdgeInsets.all(8.0),
      child: ListView(
        children: [
          CourseCard(
            image: 'assets/course_image.jpg',
            courseName: 'Introduction to Programming',
          ),
          CourseCard(
            image: 'assets/course_image.jpg',
            courseName: 'Data Structures',
          ),
          // Add more course cards as needed

```

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

```
class CourseCard extends StatelessWidget {
```

```
  final String image;
```

```
  final String courseName;
```

```
  CourseCard({required this.image, required this.courseName});
```

```
  @override
```

```
  Widget build(BuildContext context) {
```

```
    return GestureDetector(
```

```
      onTap: () {
```

```
        Navigator.push(
```

```
          context,
```

```
          MaterialPageRoute(
```

```
            builder: (context) => CourseDetailsPage(courseName: courseName, image: image),
```

```
          ),
```

```
        );
```

```
      },
```

```
      child: Card(
```

```
        elevation: 4.0,
```

```
        child: ListTile(
```

```
          contentPadding: EdgeInsets.all(8.0),
```

```

        leading: Hero(
          tag: 'course-image-$courseName',
          child: Image.asset(image, width: 50, height: 50, fit: BoxFit.cover),
        ),
        title: Text(courseName),
      ),
    ),
  );
}
}

```

coursedetailspage.dart

```

class CourseCard extends StatelessWidget {
  final String image;
  final String courseName;

  CourseCard({required this.image, required this.courseName});

  @override
  Widget build(BuildContext context) {
    return GestureDetector(
      onTap: () {

        // YE HAI Navigator.push

        Navigator.push(
          context,

```

```

MaterialPageRoute(
  builder: (context) => CourseDetailsPage(courseName: courseName, image: image),
),
);
},
child: Card(
  elevation: 4.0,
  child: ListTile(
    contentPadding: EdgeInsets.all(8.0),
    leading: Hero(
      tag: 'course-image-$courseName',
      child: Image.asset(image, width: 50, height: 50, fit: BoxFit.cover),
    ),
    title: Text(courseName),
  ),
),
);
}
}

```

profilepage.dart

```

class ProfilePage extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(title: Text("Profile")),
      body: Center(
        child: Text(

```

```

        "User Profile Information",
        style: TextStyle(fontSize: 24),
      ),
    ),
  );
}
}

```

pubspec.yaml

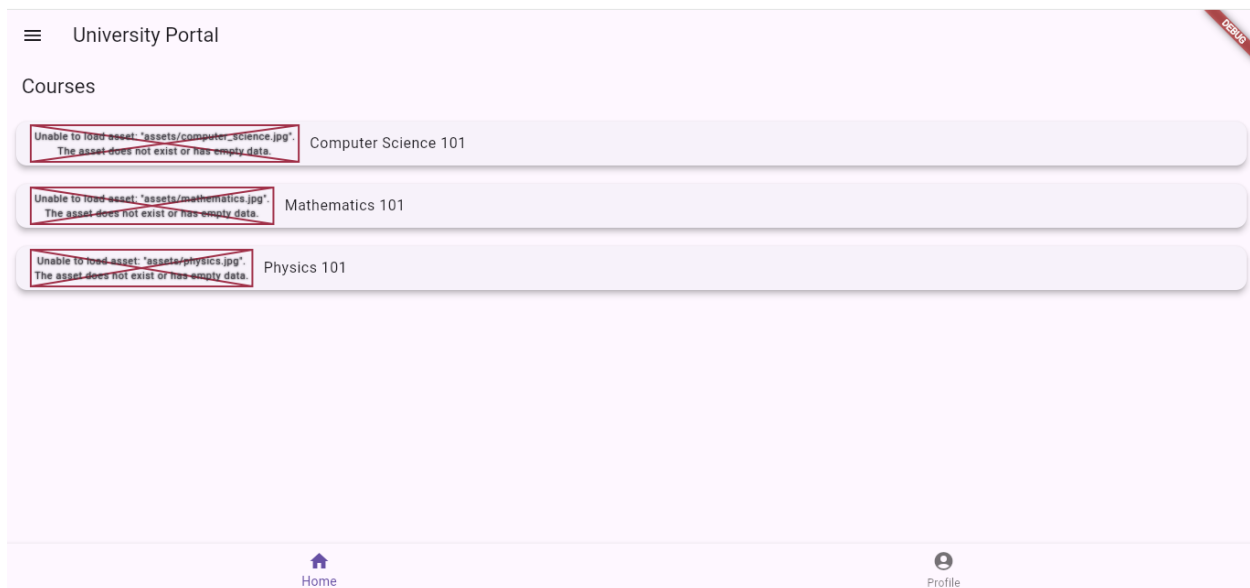
flutter:

assets:

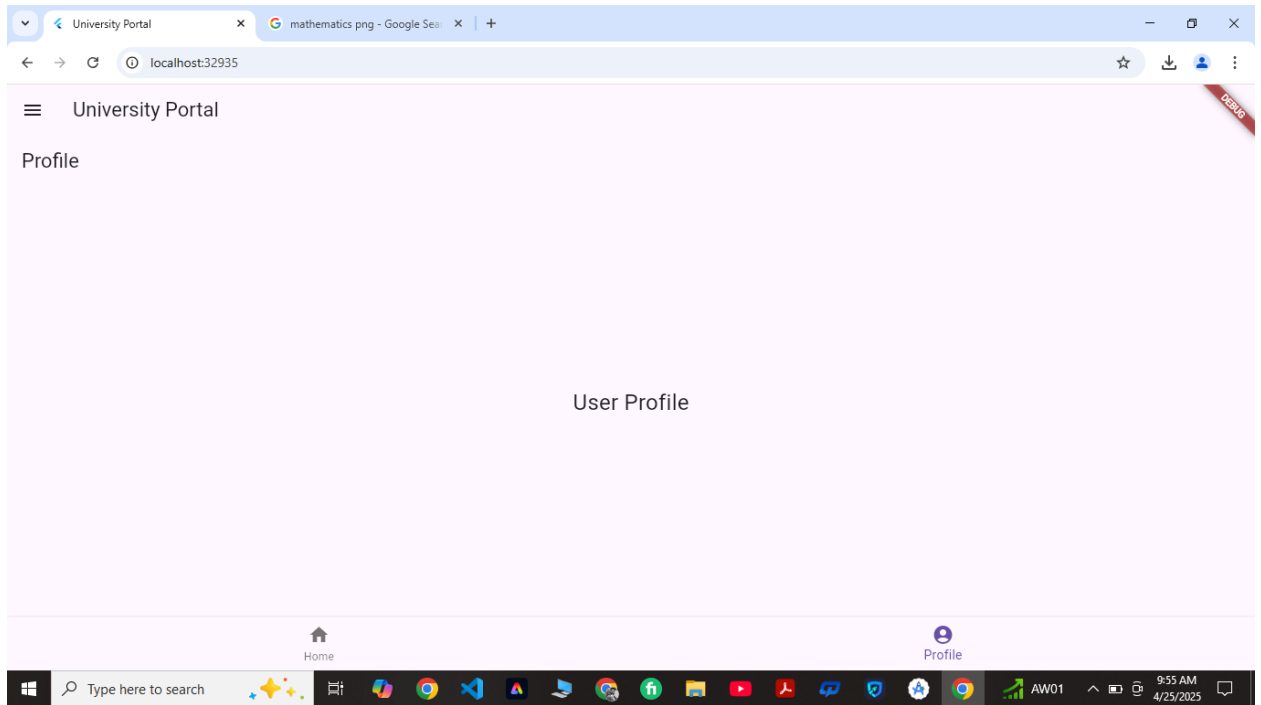
- assets/course_image.jpg

SCREENSHOT:

1) Homepage



2) ProfilePage



3) Drawer and Logout

