Aim: Navigation, Routing, and Gestures in Flutter

Introduction

Navigation, routing, and gestures are essential for building interactive Flutter applications. Navigation allows users to move between screens, routing manages structured transitions, and gestures detect user interactions like taps, swipes, and long presses.

Routing and Navigation in Flutter

In Flutter, routing and navigation are essential for managing screen transitions in an application. Flutter uses a stack-based navigation system, where screens (also called routes) are managed using a Navigator widget.

Types of Navigation in Flutter

1. Imperative Navigation (Navigator API)

- Uses Navigator.push() and Navigator.pop()
- Follows a stack-based approach (LIFO - Last In, First Out)
- Best suited for simple applications

2. Declarative Navigation (Go Router, Auto Route)

- Uses URL-based navigation
- Ideal for large applications with deep linking
- Navigator and Routes in Flutter

The Navigator manages the stack of screens in a Flutter app. Each screen is called a Route, and the Navigator widget helps in transitioning between routes.

1. Navigation in Flutter

Flutter's Navigator widget manages a stack of screens. Below is an example of basic navigation between two screens.

2. Gesture Detection in Flutter

Flutter's GestureDetector widget captures various gestures like taps, double taps, long presses, and swipes.

OUTPUT

Conclusion

Navigation allows movement between screens using Navigator. Routing helps structure navigation better using named routes. Gesture detection enables interactivity with user input. These features make Flutter apps more user-friendly.

Expenses

massuri trip
Paid by: User1 - ₹15000
Split Type: percentage

jayan owes ₹7500.00
preksha owes ₹3000.00
jatin owes ₹4500.00

any trip
Paid by: User1 - ₹20000
Split Type: percentage

rush owes ₹2000.00
 sid owes ₹1000.00
 dhairyash owes ₹5000.00
jayan owes ₹6000.00
 aryan owes ₹6000.00

eating chicken and all
Paid by: User1 - ₹15000
Split Type: equal

jatin owes ₹3750.00
 preksha owes ₹3750.00
 priyal owes ₹3750.00
jayan owes ₹3750.00

← **Add Expense**

Amount

Description

Participants (comma-separated)

Equal Split ▾

Add Expense