Navigation in Flutter
DropdownMenu
Slider

Types of Navigation in Flutter

- Stack-based navigation
- Nested and named routing
- Drawer-based navigation
- Bottom navigation bar

Stack-based Navigation

- Manages a stack of routes, using the methods `push()` and `pop()`
- Each screen is treated as a "route" added to the stack.

```
Navigator.push(context,
      MaterialPageRoute(builder: (context) => const SecondRoute()),);

Navigator.pop(context);
```

Sending data to a new screen

- To send data to a new screen, you should:
  - Define data in the new screen:

```
class Screen3 extends StatelessWidget {
  final String text;

  const Screen3({super.key, required this.text});.....
```

  - Send it through the Navigator

```
Navigator.push(context,

  MaterialPageRoute(builder: (context) =>

                          Screen3(text: "GOOGLE")));
```

Named Routes Navigation

- Routes are predefined with names in the MaterialApp widget for easy access.

```
MaterialApp(
home: FirstRoute(),
routes: {
  '/screen2': (context) => const Screen2(),
  '/screen4': (context) => const Screen4(),
      },),
```

- Use routes to navigate:

```
onPressed: () {
  Navigator.pushNamed(context, '/screen4');}
```

Sending data to a named screen

- To send data to a new screen, you should:
  - Define data in the new class:

```
class ScreenArguments {
     final String sender;
     final String message;
     ScreenArguments(this.sender, this.message);}
```

  - Pass data through pushNamed Navigator:

```
Navigator.pushNamed(context, '/screen4', arguments:ScreenArguments(s,m));
```

  - Use them in the screen:

```
final args = ModalRoute.of(context)!.settings.arguments as ScreenArguments;
Text(args.message)
```

Slider Widget

- A widget that allows users to select a value from a range by sliding a handle along a track.
- Ideal for settings like volume, brightness, and price ranges.
- You should Defines the range of values: min and max.

```
Slider(
      value: sliderValue,
      min: 0,
      max: 100,
      divisions: 10,
      label: sliderValue.round().toString(),
      onChanged: (double value) {
            setState(() {
                  sliderValue = value;
                });
            },
        ),
```

DropdownMenu Widget

- A widget for selecting one option from a predefined list.
- You should define the following:
  - **`value`**: The current value selected in the dropdown.
  - **`onChanged`**: Callback function that updates the selected value.
  - **`items`**: List of items to be displayed, mapped to `DropdownMenuItem` widgets.

DropdownMenu Widget

```
DropdownButton<String>(
  value: dropdownValue,
  icon: Icon(Icons.arrow_downward),
  onChanged: (String? newValue) {
    setState(() {
      dropdownValue = newValue!;
    });
  },
  items: <String>['Programming', 'Network', 'Cyber Security']
      .map<DropdownMenuItem<String>>((String value) {
    return DropdownMenuItem<String>(value: value, child: Text(value));}).toList(),
)
```

Practice

- Make a Registration Form consisting of:
  - Name: TextField.
  - City: DropdownMenu.
  - Age: Slider.
  - Do you have a driving licence: Radio Buttons (Yes, No).
- When ‘Submit’ is Clicked, it route the user to ResultScreen which shows the eligibility to drive.