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D15A_59

Experiment no. :- 05

Aim :- : **To apply navigation,routing and gestures in Flutter.**

Theory :-

In Flutter, navigation, routing, and gestures are essential concepts for creating interactive and navigable user interfaces.

Navigation: Navigation refers to the process of moving between different screens or pages within a Flutter app. Flutter provides the Navigator widget for managing navigation and routing.

Routing: Routing is the mechanism used to define the paths or routes between different screens in your app. Each route typically corresponds to a different widget or screen in your app.

Gesture Detection: Gestures allow users to interact with the app by tapping, dragging, swiping, or performing other touch-based actions. Flutter provides various gesture detection widgets to handle user input.

```
GestureDetector(
onTap: () {
print('Container tapped');
 },
child:
Container( widt
h: 200,
height: 200,
color: Colors.blue,
child: Center(
 child: Text('Tap Me'),
  ),
 ),
)
```

Code :-

```
import 'package:firebase_auth/firebase_auth.dart';
import 'package:flutter/material.dart';
import 'package:flutter_to_do_list/const/colors.dart';
import 'package:flutter_to_do_list/data/firestor.dart';

class Add_creen extends StatefulWidget
 { const Add_creen({super.key});

 @override
 State<Add_creen> createState() => _Add_creenState();
}

class _Add_creenState extends State<Add_creen>
 { final title = TextEditingController();
 final subtitle = TextEditingController();

 FocusNode _focusNode1 = FocusNode();
 FocusNode _focusNode2 = FocusNode();
 int indexx = 0;
 @override
 Widget build(BuildContext context)
  { return Scaffold(
    backgroundColor: backgroundColors,
    body: SafeArea(
     child: Column(
      mainAxisAlignment: MainAxisAlignment.center,
      children: [
       title_widgets(),
       SizedBox(height: 20),
       subtite_wedgite(),
       SizedBox(height: 20),
       imagess(),
       SizedBox(height: 20),
       button()
      ],
     ),
```

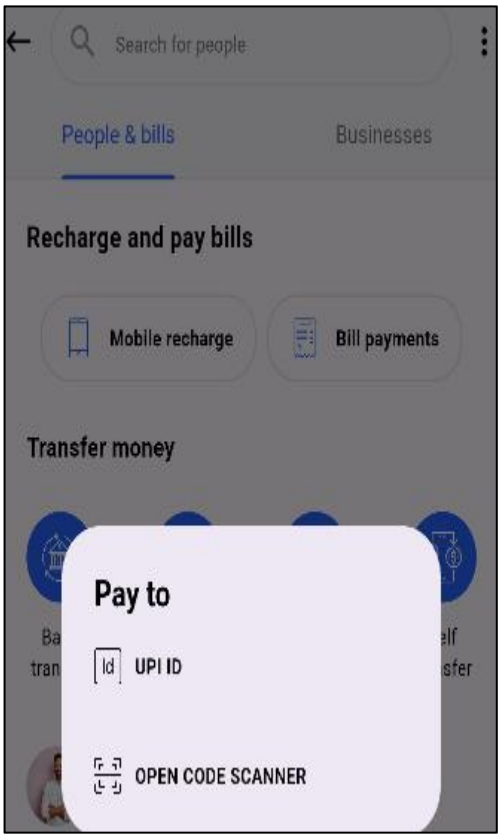
```
    ),
  );
}

Widget button()
  { return Row(
    mainAxisAlignment: MainAxisAlignment.spaceAround,
    children: [
      ElevatedButton(
        style:
          ElevatedButton.styleFrom( primary:
          custom_green, minimumSize:
          Size(170, 48),
        ),
        onPressed: () {
          Firestore_Datasource().AddNote(subtitle.text, title.text, indexx);
          Navigator.pop(context);
        },
        child: Text('add task'),
      ),
      ElevatedButton(
        style:
          ElevatedButton.styleFrom( primar
          y: Colors.red, minimumSize:
          Size(170, 48),
        ),
        onPressed: ()
          { Navigator.pop(context);
        },
        child: Text('Cancel'),
      ),
    ],
  );
}

Container imagess()
  { return
  Container( height:
  180,
    child: ListView.builder(
```

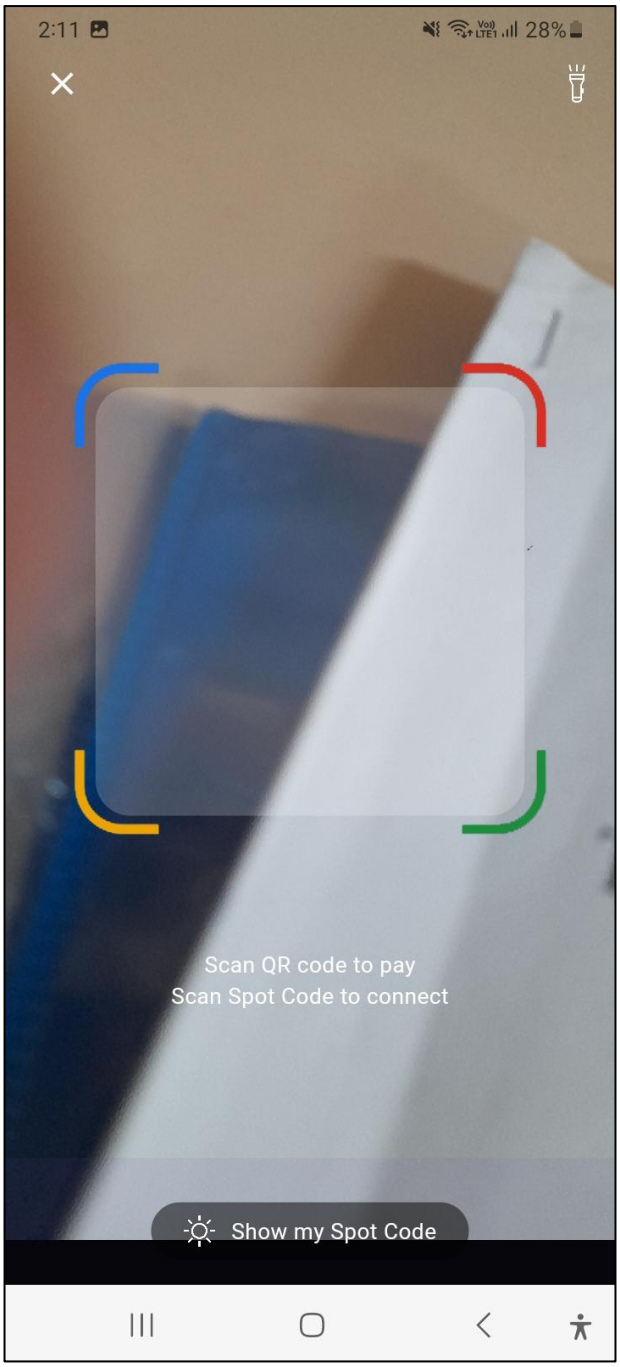
```
      itemCount: 4,
      scrollDirection: Axis.horizontal,
      itemBuilder: (context, index)
      { return GestureDetector(
          onTap: () {
            setState(()
              { indexx = index;
            });
          },
          child: Padding(
            padding: EdgeInsets.only(left: index == 0 ? 7 : 0),
            child: Container(
              decoration: BoxDecoration( borderRadius:
                BorderRadius.circular(10), border:
                Border.all(
                  width: 2,
                  color: indexx == index ? custom_green : Colors.grey,
                ),
              ),
              width: 140,
              margin: EdgeInsets.all(8),
              child: Column(
                children:
                  [ Image.asset('images/${index}.png'),
                ],
              ),
            ),
          ),
        );
      },
    ),
  );
}

Widget title_widgets()
  { return Padding(
    padding: const EdgeInsets.symmetric(horizontal: 15),
```

```
    child: Container(  decoration:
      BoxDecoration( color:
      Colors.white,
        borderRadius: BorderRadius.circular(15),
      ),
      child:
        TextField( cont
        roller: title,
        focusNode: _focusNode1,
        style: TextStyle(fontSize: 18, color: Colors.black),
        decoration: InputDecoration(
            contentPadding:
                EdgeInsets.symmetric(horizontal: 15, vertical: 15),
            hintText: 'title',
            enabledBorder:
              OutlineInputBorder( borderRadius:
              BorderRadius.circular(10), borderSide:
              BorderSide(
                color: Color(0xffc5c5c5),
                width: 2.0,
              ),
            ),
            focusedBorder:
              OutlineInputBorder( borderRadius:
              BorderRadius.circular(10), borderSide:
              BorderSide(
                color: custom_green,
                width: 2.0,
              ),
            )),
      ),
    ),
  );
}

Padding subtite_wedgite()
  { return Padding(
    padding: const EdgeInsets.symmetric(horizontal: 15),
    child: Container(
      decoration: BoxDecoration(
```

```
          color: Colors.white,
          borderRadius: BorderRadius.circular(15),
        ),
        child:
          TextField( maxLine
          s: 3, controller:
          subtitle,
          focusNode: _focusNode2,
          style: TextStyle(fontSize: 18, color: Colors.black),
          decoration: InputDecoration(
            contentPadding: EdgeInsets.symmetric(horizontal: 15, vertical: 15),
            hintText: 'subtitle',
            enabledBorder:
              OutlineInputBorder( borderRadius:
              BorderRadius.circular(10), borderSide:
              BorderSide(
                color: Color(0xffc5c5c5),
                width: 2.0,
              ),
            ),
            focusedBorder:
              OutlineInputBorder( borderRadius:
              BorderRadius.circular(10), borderSide:
              BorderSide(
                color: custom_green,
                width: 2.0,
              ),
            ),
          ),
        ),
      ),
    );
  }
}
```

Output :-


Search for people
People & bills
Businesses
Recharge and pay bills
Mobile recharge
Bill payments
Transfer money
Pay to
UPI ID
OPEN CODE SCANNER


2:11
28%
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