CHAPTER 2
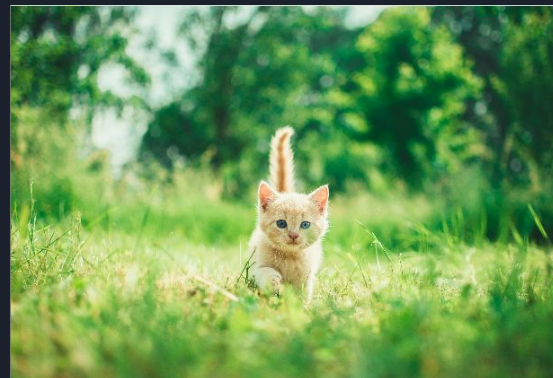
WORKSHOPS / EXERCISES

```
1   import 'package:flutter/material.dart';
2   class Newworkk extends StatefulWidget{
3     Newworkk({super.key});
4     @override
5     State<Newworkk> createState() => _Newwork();
6   }
7   class _Newwork extends State<Newworkk> {
8     int _selectedvalue = 1;
9     String? __selectedValue;
10    // List of items for the dropdown
11    final List<String> _dropdownItems = [
12      'Cat',
13      'Dog',
14      'Bird',
15      'Fish',
16    ];
17    bool _isChecked = false;
18    double _currentAge = 1;
19    @override
20    Widget build(BuildContext context){
21      return Scaffold(
22        body: Column(
23          children: [
24            Container(
25              child: Image.asset(
26                'assets/catpost.jpg',
27                fit: BoxFit.cover,
28              ), // Image.asset
29            ), // Container
30            const SizedBox(
31              height: 50,
32            ), // SizedBox
33            const Padding(
34              padding: EdgeInsets.all(8.0),
35              child: TextField(
36                decoration: InputDecoration(
37                  border: OutlineInputBorder(),
```

```
38                  hintText: 'Pet Name',
39                ), // InputDecoration
40              ), // TextField
41            ), // Padding
42            Padding(
43              padding: const EdgeInsets.all(8.0),
44              child: DropdownButton<String>(
45                value: __selectedValue,
46                hint: const Text("Breed"),
47                items: _dropdownItems.map((String value) {
48                  return DropdownMenuItem<String>(
49                    value: value,
50                    child: Text(value),
51                  ); // DropdownMenuItem
52                }).toList(),
53                onChanged: (String? newValue){
54                  setState(() {
55                    __selectedValue= newValue;
56                  });
57                },
58              ), // DropdownButton
59            ), // Padding
60            Row(
61              mainAxisAlignment: MainAxisAlignment.center,
62              children: [
63                Radio(value: 1,
64                  groupValue: _selectedvalue,
65                  onChanged: (int? value){
66                    setState(() {
67                      _selectedvalue =value!;
68                    });
69                  },
70                ), // Radio
```

```dart
              Text('male'),
              SizedBox(width: 20),
              Radio(value: 2,groupValue: _selectedvalue,
              onChanged: (int? value){
                setState(() {
                  _selectedvalue=value!;
                });
              },
              ), // Radio
              Text('female'),
              SizedBox(width: 40),
                      Checkbox(
                        value: _isChecked,
                        onChanged: (bool? value){
                          setState(() {
                            _isChecked = value ?? false;
                          });
                        }), // Checkbox
                      Text('vaccinated'),
            ]), // Row
            SizedBox(height: 30),
                Text('Pet Age',style: TextStyle(fontSize: 25),),
                Slider(
                  min: 0.0,
                  max: 100.0,
                  divisions: 100,
                  label: _currentAge.toStringAsFixed(0),
                  value: _currentAge,
                  onChanged: (double newvalue){
                    setState(() {
          _currentAge = newvalue;
        }
    );
  }
                );
              }
            ), // Slider
```

```dart
1  import 'package:flutter/material.dart';
2  class MyForm extends StatefulWidget {
3    const MyForm({super.key});
4    @override
5    _MyFormState createState() => _MyFormState();
6  }
7  class _MyFormState extends State<MyForm> {
8    String _selectedGender = 'male';
9    bool ischecked=false;
10   double  Slider = 40.0;
11   String? _selectedValue;
12   List<String> _dropdownItems = [
13     'Cat',
14     'Dog',
15     'Bird',
16     'Fish',
17   ];
18   @override
19   Widget build(BuildContext context) {
20     return Scaffold(
21       appBar: AppBar(
22         backgroundColor: Colors.brown[300],
23         centerTitle: true,
24         title: const Text(
25           'Form',
26           style: TextStyle(color: Colors.white),
27         ), // Text
28       ), // AppBar
29       body: SingleChildScrollView(
30         padding: const EdgeInsets.all(16.0),
31         child: Column(
32           crossAxisAlignment: CrossAxisAlignment.start,
33           children: <Widget>[
34             const Text(
35               'Name',
36               style: TextStyle(fontSize: 18.0),
37             ), // Text
```

```dart
38             const TextField(
39               decoration: InputDecoration(
40                 border: OutlineInputBorder(),
41                 hintText: 'Enter your name',
42               ), // InputDecoration
43             ), // TextField
44             const SizedBox(height: 20.0),
45             Text('Description',style: TextStyle(fontSize: 18),),
46   SizedBox(
47     width: 500,
48     height: 100.0,
49     child: TextField(
50       decoration: InputDecoration(
51         border: OutlineInputBorder(),
52         hintText: 'Enter description',
53       ), // InputDecoration
54       expands: true,
55       minLines: null,
56       maxLines: null,
57       textAlignVertical: TextAlignVertical.top,
58     ), // TextField
59   ), // SizedBox
60             const SizedBox(height: 20.0),
61             const Text(
62               'Select an option',
63               style: TextStyle(fontSize: 18.0),
64             ), // Text
65   Row(
66     children: [
67       DropdownButton<String>(
68         value: _selectedValue,
69         hint: const Text("Breed"),
70         items: _dropdownItems.map((String value) {
71           return DropdownMenuItem<String>(
```


Form

Name
Enter your name

Description
Enter description

Select an option
Breed ▾

Gender
● Male   ○ Female

Age
[slider]

☐ verify

```dart
72          value: value,
73          child: Text(value),
74        ); // DropdownMenuItem
75      }).toList(),
76      onChanged: (String? newValue){
77        setState(() {
78          _selectedValue= newValue;
79        });
80      },
81    ), // DropdownButton
82  ],
83  ), // Row
84        const SizedBox(height: 20.0),
85        const Text(
86          'Gender',
87          style: TextStyle(fontSize: 18.0),
88        ), // Text
89        Row(
90          children: [
91            Radio(
92              value: 'male',
93              groupValue: _selectedGender,
94              onChanged: (String? value) {
95                setState(() {
96                  _selectedGender=value!;
97                });
98              },
99            ), // Radio
100           const Text('Male'),
101           SizedBox(width: 20),
102           Radio(value: 'female',
103             groupValue: _selectedGender,
104             onChanged: (String? value){
105               setState(() {
106                 _selectedGender= value!;
107               });
108             },), // Radio
109             const Text('Female'),
110         ],
111       ), // Row
112       const SizedBox(height: 20.0),
113       const Text(
114         'Age',
115         style: TextStyle(fontSize: 18.0),
116       ), // Text
117       Slider(
118         value: _Slider,
119         min: 0.0,
120         max: 100.0,
121         divisions: 100,
122         label: _Slider.toStringAsFixed(0),
123         onChanged: (double neewvalue) {
124           setState(() {
125             _Slider=neewvalue;
126           });
127         },
128       ), // Slider
129       const SizedBox(height: 20.0),
130       Row(
131         children: [
132           Checkbox(
133             value: ischecked,
134             onChanged: (bool? valuee) {
135               setState(() {
136                 ischecked =valuee ?? false;
137               });
138             },
139           ), // Checkbox
140             const Text('verify'),
141           ],
142         ), // Row
143         const SizedBox(height: 20.0),
144         Container(
145           child: Image.asset(
146             'assets/catpost.jpg',
147             fit: BoxFit.cover,
148           ), // Image.asset
149         ), // Container
150         const SizedBox(height: 20.0),
151         const Text(
152           'This is some text with custom font',
153           style: TextStyle(
154             fontSize: 18.0,
155             fontFamily: 'Roboto',
156           ), // TextStyle
157         ), // Text
158       ], // <Widget>[]
159     ), // Column
160   ), // SingleChildScrollView
161 ); // Scaffold
162 }
163 }
```
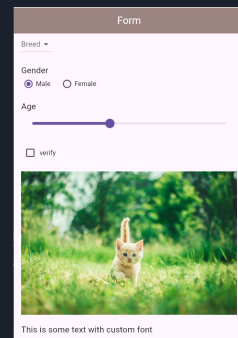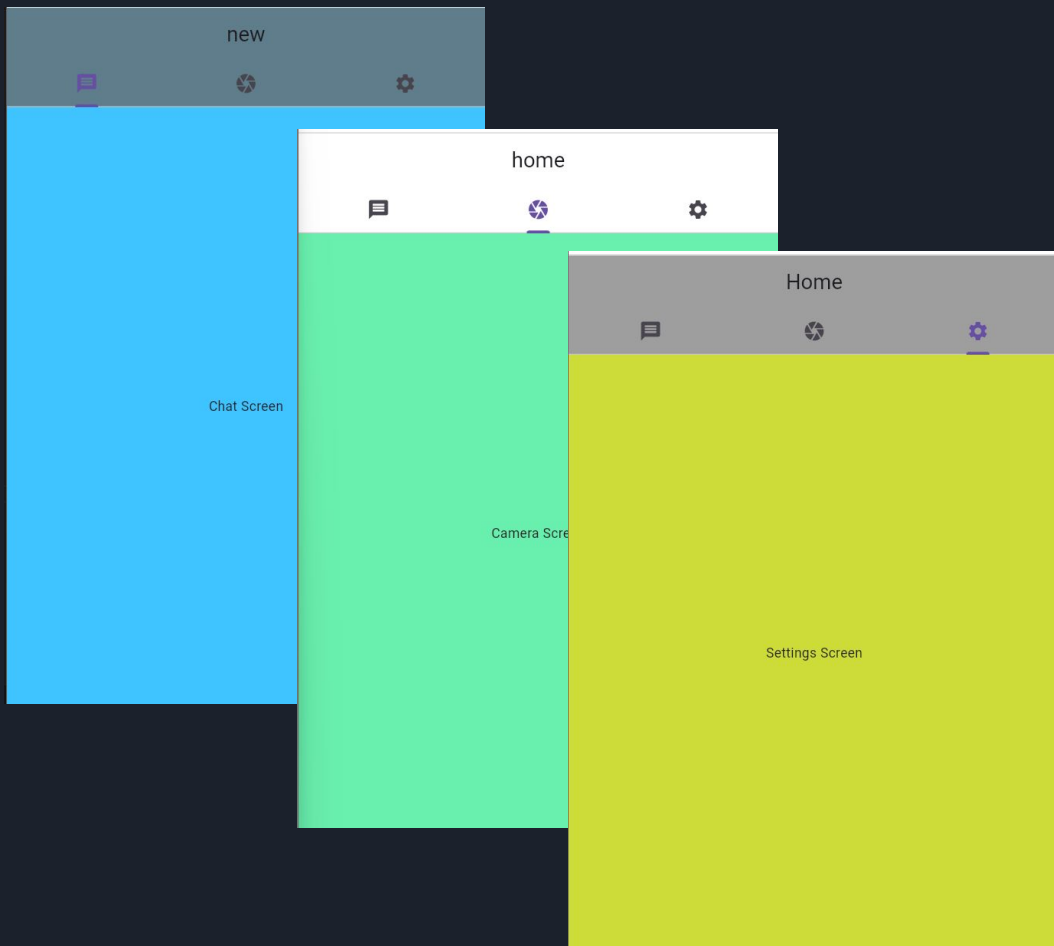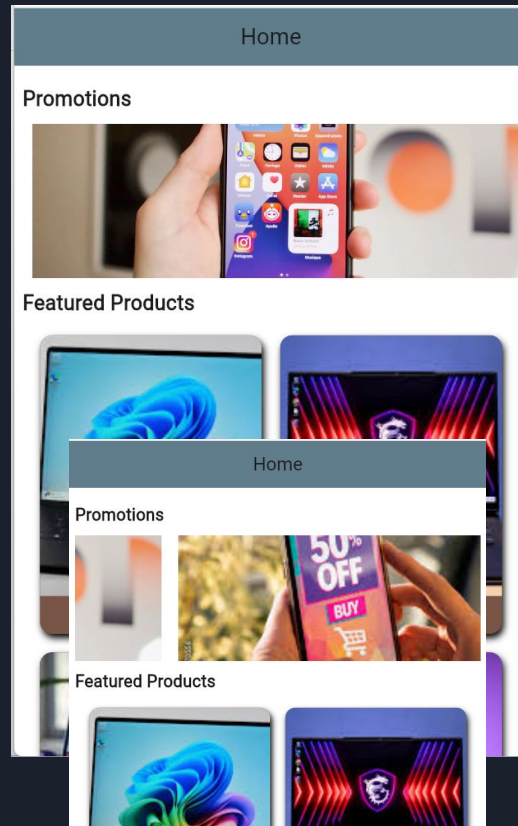
EXERCISE 1


```dart
import 'package:flutter/material.dart';
class Exercisess extends StatelessWidget{
  Exercisess({super.key});
  @override
  Widget build(BuildContext context) {
    return DefaultTabController(length: 1, child:
    Scaffold(
      backgroundColor: Colors.lightBlueAccent,
      appBar: AppBar(
        title: Text('new'),
        backgroundColor: Colors.blueGrey,
        centerTitle: true,
        bottom: TabBar(tabs:
        [
          Tab(icon: Icon(Icons.message),),
          Tab(icon: Icon(Icons.camera_sharp),),
          Tab(icon: Icon(Icons.settings),),
        ]
        ), // TabBar
      ), // AppBar
      body: Center(
        child: Text('Chat Screen'),
      ), // Center
    ), // Scaffold
    ); // DefaultTabController
  }
}
```

```dart
1   import 'package:flutter/material.dart';
2   class Productt extends StatelessWidget{
3     Productt({super.key});
4     final List<String> productImages = [
5       'assets/lap1.jpg',
6       'assets/lap5.jpg',
7       'assets/lap3.jpg',
8       'assets/lap4.jpg',
9     ];
10    @override
11    Widget build(BuildContext context) {
12      return Scaffold(
13        backgroundColor: Colors.white,
14        appBar: AppBar(
15          title: Text('Home'),
16          centerTitle: true,
17          backgroundColor: Colors.blueGrey,
18        ), // AppBar
19        body:
20        SingleChildScrollView(
21          padding: EdgeInsets.all(8),
22          child: Column(
23            crossAxisAlignment: CrossAxisAlignment.start,
24            children: [
25              Padding(padding: EdgeInsetsGeometry.all(5)),
26              const Text('Promotions',style: TextStyle(fontSize: 20,
27                  fontWeight: FontWeight.bold,)), // TextS
28              SingleChildScrollView(
29                scrollDirection: Axis.horizontal,
30                child: Row(
31                  children: [
32                    Container(
33                      width: 500,
34                      height: 150,
35                      margin: EdgeInsets.all(10),
36                      decoration: BoxDecoration(
37                        image: DecorationImage(
```

```dart
37                        image: DecorationImage(
38                          image: AssetImage('assets/mob.png'),
39                          fit: BoxFit.cover,
40                        ), // DecorationImage
41                      ), // BoxDecoration
42                    ), // Container
43                    Container(
44                      width: 500,
45                      height: 150,
46                      margin: EdgeInsets.all(10),
47                      decoration: BoxDecoration(
48                        image: DecorationImage(
49                          image: AssetImage('assets/mobe.jpg'),
50                          fit: BoxFit.cover
51                        ), // DecorationImage
52                      ), // BoxDecoration
53                    ), // Container
54                    Container(
55                      width: 500,
56                      height: 150,
57                      margin: EdgeInsets.all(10),
58                      decoration: BoxDecoration(
59                        image: DecorationImage(
60                          image: AssetImage('assets/mob.png'),
61                          fit: BoxFit.cover,
62                        ), // DecorationImage
63                      ), // BoxDecoration
64                    ), // Container
65                  ],
66                ), // Row
67              ), // SingleChildScrollView
68              const Text('Featured Products',style: TextStyle(
69                  fontSize: 20,fontWeight: FontWeight.bold)), // T
70                  GridView.builder(
```

```dart
GridView.builder(
  padding: EdgeInsets.all(12),
  shrinkWrap: true,
  physics: NeverScrollableScrollPhysics(),
  gridDelegate: SliverGridDelegateWithFixedCrossAxisCo
    crossAxisCount: 2,
    crossAxisSpacing: 8.0,
    mainAxisSpacing: 8.0,
    childAspectRatio: 3 /4,
  ), // SliverGridDelegateWithFixedCrossAxisCount
  itemCount: 4,
  itemBuilder: (context, index){
    return Container(
      margin: EdgeInsets.all(5),
      decoration: BoxDecoration(
        color: Colors.brown,
        borderRadius: BorderRadius.circular(12),
        boxShadow: [
          BoxShadow(
            color: Colors.black,
            blurRadius: 5,
            offset: const Offset(2, 4),
          ), // BoxShadow
        ],
      ), // BoxDecoration
      child: Column(
        crossAxisAlignment: CrossAxisAlignment.center,
        children: [
          Expanded(
            child: ClipRRect(
              borderRadius: BorderRadius.vertical(
                top: Radius.circular(12),
              ), // BorderRadius.vertical
              child: ClipRRect(
                borderRadius: BorderRadius.vertical(
                  top: Radius.circular(12),
                ), // BorderRadius.vertical
                child: Image.asset(
                  productImages[index],
                  fit: BoxFit.cover,
                  width: double.infinity,
                ), // Image.asset
              ), // ClipRRect
            ), // Expanded
            SizedBox(height: 8),
            Text(
              'Product ${index + 1}',
              style: TextStyle(
                fontSize: 15,
                fontWeight: FontWeight.bold,
                color: Colors.white
              ), // TextStyle
            ), // Text
            SizedBox(height: 8),
          ],
        ), // Column
      ); // Container
    },
  ),
          // GridView.builder
        ],
      ), // Column
    ), // SingleChildScrollView
  ); // Scaffold
}
}
```