

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

```
void main() {
  runApp(MaterialApp(
    home: Home(),
  ));
}
```

```
class Home extends StatelessWidget {
  const Home({Key? key}) : super(key: key);

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        title: Text('my first flutter app'),
        centerTitle: true,
        backgroundColor: Colors.amber,
      ),
      body: Center(
        // child: Text('This is cghbfnhj', style: TextStyle(fontSize:
20)),
        // child: Image.asset('assets/img.png'),
        // child: Icon(
        //   Icons.alarm_on_outlined,
        //   color: Colors.blue,
        //   size: 50,
        // ),
        // child: TextButton(
        //   onPressed: () {
        //     print('you clicked me');
        //   },
        //   child: Text('Click me'),
        // ),
        // child: TextButton.icon(
        //   onPressed: () {},
        //   icon: Icon(Icons.mail_outline, color: Colors.red),
        //   label: Text('Mail me'),
        // ),
        child: GestureDetector(
          onTap: () {
            print('you clicked me');
          },
          // gesture
        ),
      ),
    );
  }
}
```

```
//common widgets and layout widgets
class Home2 extends StatelessWidget {
  const Home2({Key? key}) : super(key: key);

  @override
  Widget build(BuildContext context) {
    return Scaffold(
```

```

    appBar: AppBar(
      title: Text('My first flutter app'),
      backgroundColor: Colors.amber,
      centerTitle: true,
    ),
    body: Row(
      mainAxisAlignment: MainAxisAlignment.spaceEvenly,
      children: [
        Text('Hello world'),
        TextButton(
          onPressed: () {
            print('You clicked me !');
          },
          child: Text('Click me')),
        Container(
          color: Colors.cyan,
          padding: EdgeInsets.all(30.0),
          child: Text('hello')
        )
      ],
    ),
  );
}

```

```

//form widget with validation
class Home3 extends StatelessWidget {
  // const Home3({Key? key}) : super(key: key);
  final formkey = GlobalKey<FormState>();

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        title: Text('My first flutter app'),
        backgroundColor: Colors.amber,
        centerTitle: true,
      ),
      body: Container(
        padding: EdgeInsets.symmetric(horizontal: 20),
        child: Form(
          key: formkey,
          child: Column(
            mainAxisAlignment: MainAxisAlignment.center,
            children: [
              TextFormField(
                decoration: InputDecoration(
                  hintText: 'Username'
                ),
                validator: (value){
                  if(value!.isEmpty){
                    return "enter correct name" ;
                  }
                },
              ),
              TextFormField(
                obscureText: true,
                decoration: InputDecoration(
                  hintText: 'Password'
                ),
              ),
            ],
          ),
        ),
      ),
    );
  }
}

```

```

        validator: (value){
          if(value!.isEmpty){
            return "Enter correct password" ;
          }
        },
      ),
      TextButton(
        onPressed: () {
          if (formkey.currentState!.validate()){
            print("Successfully logged in");
          }
        },
        child: Text('Login'))
    ],
  ),
),
);
}
}

//charts
// dependencies:
// flutter:
// sdk: flutter
// fl_chart: ^0.45.1

// or

// flutter pub pub add fl_chart
class Home4 extends StatelessWidget {
  const Home4({Key? key}) : super(key: key);

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        title: Text('My first flutter app'),
        backgroundColor: Colors.amber,
        centerTitle: true,
      ),
      body: Container(
        child: LineChart(
          LineChartData( borderData: (FlBorderData(show: false)),
lineBarsData: [
            LineChartBarData(spots: [
              const FlSpot(0, 1),
              const FlSpot(1, 3),
              const FlSpot(2, 10),
              const FlSpot(3, 7),
              const FlSpot(4, 12),
              const FlSpot(5, 13),
              const FlSpot(6, 17),
              const FlSpot(7, 15),
              const FlSpot(8, 20)
            ])
          ],
        ),
      ),
    );
  }
}

```

```

    ),
  );
}
}

```

```

//navigation and routing
class FirstRoute extends StatelessWidget {
  const FirstRoute({Key? key}) : super(key: key);

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        title: Text('My first flutter app'),
        backgroundColor: Colors.amber,
        centerTitle: true,
      ),
      body: Row(
        mainAxisAlignment: MainAxisAlignment.center,
        children: [
          TextButton(
            onPressed: () {
              Navigator.push(
                context,
                MaterialPageRoute(builder: (context) => SecondRoute()),
              );
            },
            child: Text('click me'),
          ),
        ],
      ),
    );
  }
}

```

```

class SecondRoute extends StatelessWidget {
  const SecondRoute({Key? key}) : super(key: key);

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        title: Text('My first flutter app'),
        backgroundColor: Colors.amber,
        centerTitle: true,
      ),
      body: Row(
        mainAxisAlignment: MainAxisAlignment.center,
        children: [
          TextButton(
            onPressed: () {
              Navigator.pop(context);
            },
            child: Text('Go back'),
          ),
        ],
      ),
    );
  }
}

```

```
    )  
    ;  
}
```