

★ Web Design & Development ➤ Mobile Apps ➤ Flutter For Dummies Cheat Sheet

Cheat Sheet

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Flutter For Dummies

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Flutter's **online documentation** is a great source of information, but sometimes you'd rather glance quickly at an example. This cheat sheet has some sample code. Just grab it and go!

(To grab this code, visit **All My Code**.)



A "Hello World" Dart Program

```
main() => print('Hello World');
```

A "Hello World" Flutter Program

```
import 'package:flutter/material.dart';
main() => runApp(HelloApp());

class HelloApp extends StatelessWidget {
    Widget build(BuildContext context) {
      return MaterialApp(
         home: Material(
            child: Text("Hello world!"),
          ),
      );
    }
}
```

A Simple Scaffold

```
Scaffold(
  appBar: AppBar(
    title: Text("I'm aan AppBar."),
  ),
  body: Center(
    child: Text("I'm a Text widget."),
  ),
  floatingActionButton: FloatingActionButton(
    child: Icon(Icons.ac_unit),
  ),
  drawer: Drawer(
    child: Center(child: Text("I'm a drawer.")),
  ),
  ),
}
```

A Cupertino App

```
import 'package:flutter/cupertino.dart';
void main() => runApp(CupterinoApp());
class CupterinoApp extends StatelessWidget {
 @override
 Widget build(BuildContext context) {
    return CupertinoApp(
      home: CupertinoPageScaffold(
        navigationBar: CupertinoNavigationBar(
          backgroundColor: Color.fromRGBO(66, 165, 245, 1.0),
          middle: Text("I'm a navigation bar"),
        ),
        child: Center(
          child: Text('Hello from Cupertino, Californa!'),
        ),
      ),
   );
 }
```

A Column

```
Column(
  mainAxisAlignment: MainAxisAlignment.center,
  children: [
    Text("I'm on top."),
    Text("I'm in the middle."),
    Text("I'm the bottom."),
    ],
)
```

Responding to a Button Press

```
import 'package:flutter/material.dart';
void main() => runApp(ButtonDemo());
class ButtonDemo extends StatelessWidget {
 Widget build(BuildContext context) {
    return MaterialApp(
      home: MyHomePage(),
   );
}
class MyHomePage extends StatefulWidget {
 _MyHomePageState createState() => _MyHomePageState();
class _MyHomePageState extends State {
 String _whatToDisplay;
 void initState() {
    _whatToDisplay = 'Click Me';
 void _doSomething() {
    setState(() {
      _whatToDisplay = 'Thank you for clicking';
    });
 Widget build(BuildContext context) {
    return Scaffold(
      body: Center(
        child: RaisedButton(
          child: Text( whatToDisplay),
          onPressed: _doSomething,
        ),
     ),
   );
 }
}
```

Some Useful Layout Widgets

```
Material(
  child: SafeArea(
    child: Column(
      children: [
        Expanded(
          child: Container(
            height: 50.0,
            color: Colors.blue,
          ),
        ),
        SizedBox(
          height: 50.0,
        ),
        Container(
          alignment: Alignment.bottomRight,
          height: 100.0,
          color: Colors.blue,
          child: Padding(
            padding: const EdgeInsets.all(20.0),
            child: Text(
               'Hello',
              style: TextStyle(backgroundColor: Colors.red),
            ),
          ),
        ),
      ],
    ),
  ),
```

A Text Field

```
class _MyHomePageState extends State {
 final _myController = TextEditingController();
 @override
 void dispose() {
    _myController.dispose();
   super.dispose();
 }
 @override
 Widget build(BuildContext context) {
    return Material(
      child: Center(
        child: Column(
          mainAxisAlignment: MainAxisAlignment.center,
          children: [
            TextField(
              decoration: InputDecoration(labelText: "Type something:"),
              controller: _myController,
            ),
            RaisedButton(
              child: Text("UPPERCASE"),
              onPressed: () =>
                  _myController.text = _myController.text.toUpperCase(),
            ),
          ],
       ),
     ),
   );
 }
}
```

A Slider

```
class _MyHomePageState extends State {
 double _sliderValue = 1.0;
 void _refreshSlider(double newValue) {
    setState(() {
      _sliderValue = newValue;
   });
 }
 @override
 Widget build(BuildContext context) {
    return Material(
      child: Center(
        child: Column(
          mainAxisAlignment: MainAxisAlignment.center,
          children: [
            Text(_sliderValue.toStringAsFixed(2)),
            Slider(
              value: _sliderValue,
              onChanged: _refreshSlider,
              min: 1.0,
              max: 10.0,
            )
          ],
        ),
     ),
   );
 }
```

Radio Buttons

```
class _MyHomePageState extends State {
  int _radioValue;
 void _refreshRadio(int newValue) {
    setState(() {
      _radioValue = newValue;
   });
 }
 @override
 Widget build(BuildContext context) {
    return Material(
      child: Center(
        child: Column(
          mainAxisAlignment: MainAxisAlignment.center,
          children: [
            Text(_radioValue?.toString() ?? 'Select One'),
              mainAxisAlignment: MainAxisAlignment.center,
              children: [
                Text('0'),
                Radio(
                    value: 0,
                    groupValue: _radioValue,
                    onChanged: _refreshRadio),
                Text('1'),
                Radio(
                    value: 1,
                    groupValue: _radioValue,
                    onChanged: _refreshRadio),
                Text('2'),
                Radio(
                  value: 2,
                  groupValue: _radioValue,
                  onChanged: _refreshRadio,
                )
              ],
            ),
          ],
        ),
      ),
   );
 }
```

Basic Navigation

```
class FirstPage extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return Material(
      child: Center(
        child: RaisedButton(
          child: Text('Go to second page'),
          onPressed: () {
            Navigator.push(
              context,
              MaterialPageRoute(
                builder: (context) => SecondPage(),
              ),
            );
          },
        ),
      ),
    );
  }
}
class SecondPage extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return Material(
      child: Center(
        child: RaisedButton(
          onPressed: () {
            Navigator.pop(context);
          },
          child: Text('Go back!'),
        ),
      ),
   );
  }
}
```

A List

```
List movieName = [
  "Casablanca",
  "Citizen Kane",
  "Lawrence of Arabia",
];

ListView.builder(
  itemCount: movieName.length,
  itemBuilder: (context, index) {
    return ListTile(
        title: Text(movieName[index]),
        onTap: () => _goToDetailPage(movieName[index]));
},
)
```

Animation

```
class MyHomePageState extends State
   with SingleTickerProviderStateMixin {
 Animation animation;
 AnimationController controller;
 @override
 void initState() {
    super.initState();
   controller =
        AnimationController(duration: const Duration(seconds: 3), vsync: this);
   animation = Tween(begin: 100.0, end: 500.0).animate(controller)
      ..addListener(() {
        setState(() {});
      });
    controller.forward();
 }
 @override
 Widget build(BuildContext context) {
    return Material(
      child: Stack(
        children: [
          Positioned(
            left: 150.0,
            top: animation.value,
            child: Icon(
              Icons.music_note,
              size: 70.0,
            ),
          ),
        ],
      ),
   );
 @override
 void dispose() {
   controller.dispose();
   super.dispose();
 }
}
```

About the Book Author

Barry Burd, PhD, is a veteran educator and a professor of mathematics and computer science at Drew University. When he's not lecturing at the university, Barry speaks at professional conferences and somehow finds time to write books, including *Java For Dummies* and *Beginning Programming with Java For Dummies*.