

THE ULTIMATE FLUTTER CHEAT SHEET

INPUTS & CONTROLS



TextField displays a keyboard input field

```
TextField(
  controller: TextEditingController,
  keyboardType: TextInputType.number,
  decoration: InputDecoration,
  onChanged: (newVal) => {},
)
```

FlatButton shows you a button that you can press

```
FlatButton(
  child: Widget, // Usually Text or Container
  onPressed: () => {},
  textColor: Colors.red,
)
```

Note: It's besties **OutlineButton** and **RaisedButton** accept similar parameters

Create your own dropdown using **DropDownButton**:

```
DropDownButton<String>(
  value: curValue, // selected option
  icon: Icon(Icons.arrow_drop_down),
  onChanged: (newVal) => {},
  items: [
    DropdownMenuItem(
      value: "opt1", child: Text("Option 1")
    ),
    ...
  ]
)
```

RESPONSIVE DESIGN



Use **MediaQuery** to determine what device size you're using; adjust your output accordingly.

```
final width = MediaQuery.of(context).width;
if (width <= 600) {
  // mobile
} else if (width <= 960) {
  // tablet
} else {
  // desktop
}
```

PLUGINS



These plugins come highly recommended. Try 'em!

flutter_svg	get	animations
provider	flutter_hooks	google_fonts
wiredash	video_player	dio
sentry	url_launcher	image_picker
http	shared_preferences	hive

IF YOU LIKED THIS..

Then check out my **Flutter Tricks email series** at yaz.in/flutter



INTERACTIONS



Use **AlertDialog** to display alerts to the user

```
AlertDialog(
  title: Text,
  content: Text, // shown in the Alert body
  actions: <Widget>[], // usually FlatButton's
)
// trigger it..
showDialog(
  context: context,
  builder: (_) => AlertDialog(..),
  barrierDismissible: bool, // hide on background tap
);
```

Use a **SnackBar** to display short-lived messages

```
Scaffold.of(context).showSnackBar(
  SnackBar(
    content: Text('Greetings'),
    action: SnackBarAction
  )
);
```

To respond to user interactions, try a **GestureDetector**:

```
GestureDetector(
  onTap: () => childTapped(),
  child: Widget,
)
```

Finally, to navigate between screens use **Navigator**:

```
Navigator.of(context).push(
  MaterialPageRoute(
    builder: (_) => NextScreen // Widget
  )
)
```

Note: Go back to the previous screen using **.pop()**

DART



Filter lists using **.where**, and don't forget **.toList()**

```
fruits = ['apple', 'avocado', 'banana']
fruits.where((f) => f.startsWith('a')).toList()
```

Common ways to iterate over a list:

```
fruits.forEach((f) => eat(f)) // returns null
fruits.map((f) => Text(f)).toList() // returns List
```

And if you need to access the index as well:

```
fruits.asMap().entries.map((f) =>
  Text('${f.key} - ${f.value}')).toList()
```

Use **...** to merge lists

```
Column(
  children: [
    Text('List of Items'),
    ...itemList() // method that returns <Widget>[]
  ]
)
```

..and **reduce** is a great tool to add to your belt:

```
numbers = [1, 2, 3, 5, 7, 9]
numbers.reduce((sum, num) => sum + num, 0)
```

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STRUCTURE

Use a **Scaffold** as the base layer for all your screens

```
Scaffold(  
  body: Widget,  
  appBar: AppBar,  
)
```

A **Column** arranges things vertically quite nicely

```
Column(  
  children: <Widget>[],  
  mainAxisAlignment: MainAxisAlignment.start,  
  crossAxisAlignment: CrossAxisAlignment.stretch,  
)
```

and a **Row** is great for lining things up horizontally

```
Row(  
  children: <Widget>[],  
  mainAxisAlignment: MainAxisAlignment.spaceBetween,  
  crossAxisAlignment: CrossAxisAlignment.center  
)
```

If your **Row** or **Column** overflows, try replacing them with a **ListView** (to allow scrolling) or a **Wrap** to wrap to a new line

Use a **ListView** to hold a list of items (in any axis). Similar to Row/Column but also **supports scrolling**.

```
ListView(  
  scrollDirection: Axis.horizontal,  
  shrinkWrap: bool, // don't fill the main axis  
  children: <Widget>[],  
  // or lazy-load items using:  
  itemCount: 10,  
  itemBuilder: (context, index) => Widget,  
)
```

Finally, say hello to the most popular widget™, **Container**

```
Container(  
  child: Widget,  
  alignment: Alignment.topLeft,  
  padding: EdgeInsets.all(4),  
  decoration: BoxDecoration(), // see below  
  width: 150,  
  height: 100,  
)
```

BoxDecoration has some pretty nifty properties:

```
BoxDecoration(  
  color: Colors.red, // background  
  border: Border.all(width: 2),  
  borderRadius: BorderRadius.circular(5),  
  boxShadow: <BoxShadow>[],  
  gradient: LinearGradient(colors: <Color>[]),  
)
```

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ALIGNMENT & LAYOUT

Order brings joy. We could all use some extra joy.

Center does pretty much what you'd expect:

```
Center(child: Widget)
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Align allows you to place things wherever you want:

```
Align(  
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Note: To specify position by pixels, use **Positioned**

Expanded causes the child to expand along the main axis

```
Expanded(  
  child: Widget,  
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A **Stack** is perfect for drawing things on top of each other:

```
Stack(  
  children: <Widget>[],  
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)
```

Finally, **SizedBox** gives you precise control over the space available (often used as a spacer too)

```
SizedBox(  
  child: Widget,  
  width: 150,  
  height: 100,  
)
```

DISPLAY

```
Text("Aloha", style: TextStyle)
```

```
TextStyle(  
  fontSize: 18,  
  color: Colors.red,  
  fontWeight: FontWeight.bold,  
  fontFamily: 'Raleway',  
  height: 1.5, // 1.5 * fontSize  
)
```

Use **RichText** to style words on the same line differently

```
RichText(  
  text: TextSpan(children: [  
    TextSpan(text: "Hi", style: TextStyle),  
    TextSpan(text: "there", style: TextStyle),  
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Use **Icon** to quickly drop some commonly used icons

```
Icon(  
  Icons.timer,  
  size: 24, // dimensions, in px  
  color: Colors.red  
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Finally, **Image** to display your own asset

```
Image.asset(  
  "./assets/path.png",  
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)
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