## **HOW TO CREATE YOUR FIRST FLUTTER APP**



<u>Flutter</u> has quickly entered the app development world. Launched by Google in October 2018, Flutter now has a reported 500,000+ users a month. It's good for quick app development, prototyping new features, A/B testing new features, or even building an all-out application.

Flutter is a cross-platform development tool that lets a dev write one body of code and deploy on the web, iOS, and android. Desktop development has also recently been added, with a <u>Flutter for Desktop Alpha release</u>.

Getting started is easy, especially with some extra tips and tricks.

# **Installing Flutter**

The <u>Flutter install guide</u> is very helpful, with detailed instructions on how to get Flutter installed on each OS:

- Mac
- Windows
- Linux

#### **VS Code extensions**

<u>VS Code is a great IDE</u> for any programming language and Flutter is no exception. Specifically, the Flutter extension to VS Code gives a batch of flutter commands that can be run from VS Code.

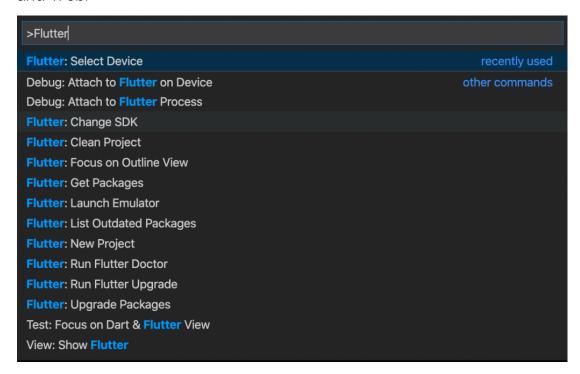
Normally, they're run from the command line.

Flutter has some great extensions on the VS Code marketplace that speed up some of the development process. A few notable extensions are:

- Flutter
- Dart
- Bracket Pair Colorizer 2

The last one is added for fun. It helps see through the enormous amount of parenthesis and brackets created by nesting widget inside of widget.

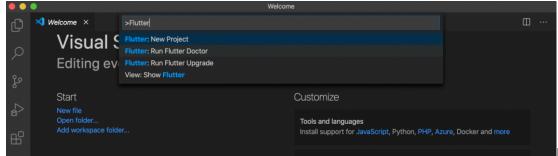
I tend to use the Flutter: Select Device for switching between debugging the app on iOS, Android, and Web.



## Hello World: Your first app

After installation, Flutter has a custom Hello World app that is easy to set up. Any new project created begins with this starter app.

In VS Code, creating a new application is easy. Access the menu with Command + Shift + P. Select Flutter: New Project.



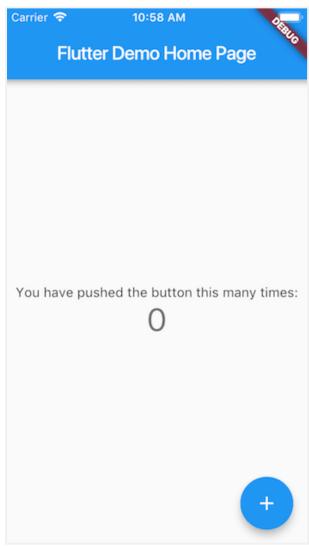
In the terminal, you can

do this:

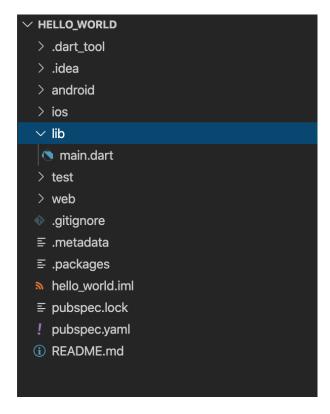
flutter create myapp

# cd myapp flutter devices flutter run

Both options will generate a Flutter project for you to begin.



Inside the created project, are the following directories.



- android controls all your android deployment instructions.
- ios controls your iOS deployment instructions.
- pubspec.yaml stores all your app dependencies, assets folders, font instructions, etc.
- **lib** is where the bulk of the application files are written and stored.

# Popular packages

Packages for Flutter can be found on <a href="https://pub.dev/">https://pub.dev/</a>. Common packages you'll likely use:

- Provider for state management
- Charts\_Flutter for graphing
- Spinkit for creating loading widgets
- <u>Cloud Firestore</u> for working with Google's Cloud Firestore API

## Flutter shortcuts, tips & tricks

VS Code and Android Studio both offer helpful shortcuts that speed up your Flutter development.

## **Lightbulb icon**

The **lightbulb icon** will appear while you're developing, and it makes adding or removing widgets so much easier. It might not look like a lot now, but this tool is a huge timesaver, keeping you from having to copy and paste bodies of code.

When you put the cursor on a widget, the yellow lightbulb appears to the left. Click it and the popup window appears. Its options will add common widgets to the selected widget or remove or extract the present widget.

```
return Center(
child: SiredBox(
Wrap with widget...
Wrap with Center
Wrap with Column
Wrap with Padding
Wrap with Padding
Wrap with StreamBuilder
Swap with parent
Remove this widget
Extract Local Variable
Extract Method
Extract Widget
bool _isValidURL(String text) {
return Uri.parse(text).isAbsolute;
}
```

#### **Keystrokes**

Code is automatically written with the lightbulb, and the VS Code IDE also does some key input detection.

Type **stf** or **stl** in the ide to auto-import all the code necessary to write a stateful or stateless widget. When the shortcut is selected, all the code appears with 5 cursors to name your new widget.

#### **Hotkey**

Another helpful hotkey is: **alt + shift + f**. This shortcut automatically formats the code to the Flutter standard. It only works if there are no errors found in the code.

The hotkey will turn a batch of code like this:

```
print("Future Builder snapshot data: $snapshot.data");
return new Container(color: Colors.black54,child: Align(alignment: Alignment.center,
child: Column(mainAxisSize: MainAxisSize.min,children: [Container(child: IframeScreen(snapshot.data)),],),)
); // Container
}) // FutureBuilder
: Container(
```

And turn it

into this:

## **Additional resources**

For more articles like this, explore these resources:

- BMC DevOps Blog
- Kubernetes Guide, a series of articles & tutorials
- Python Development Tools: Your Python Starter Kit
- Amazon Braket Quantum Computing: How To Get Started