

Flutter Installation Guide

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This guide explains the steps needed to install and get a flutter development setup up and running on Windows.

System Requirements

Microsoft® Windows® 7/8/10 (32- or 64-bit)

The Android Emulator only supports 64-bit Windows (learn more).

- 4 GB RAM minimum, 8 GB RAM recommended
- 2 GB of available disk space minimum,
 4 GB Recommended (500 MB for IDE + 1.5 GB for Android SDK and emulator system image)
- 1280 x 800 minimum screen resolution

Android Users

For Android users, follow these steps:

Turn on Developer mode on your android phone. To find out how to do this, google the method to turn on developer mode for your specific branch of phone. Typically, this involves pressing the "Build Number" under system information 7 times.

Next follow these steps:

- Set up Android Studio
- Set up the Android SDK
- Install Visual Studio Code (vscode)
- Installing the Flutter plugin for Visual Studio Code
- Installing Flutter
- Creating a flutter project

If, for some reason, you cannot enable developer mode on your android phone, or if your laptop does not detect your phone, follow the steps listed for iOS Users.

iOS Users

iOS users, follow these steps.

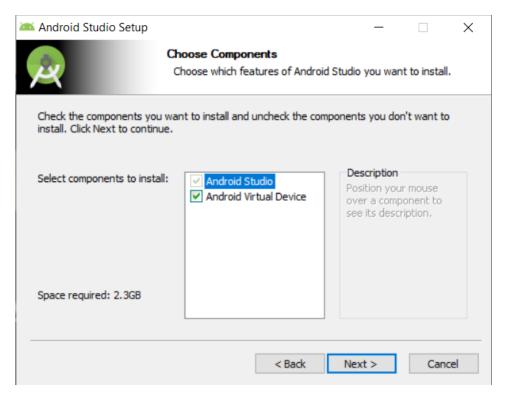
- Set up Android Studio
- Set Up Emulator
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Android Studio Setup

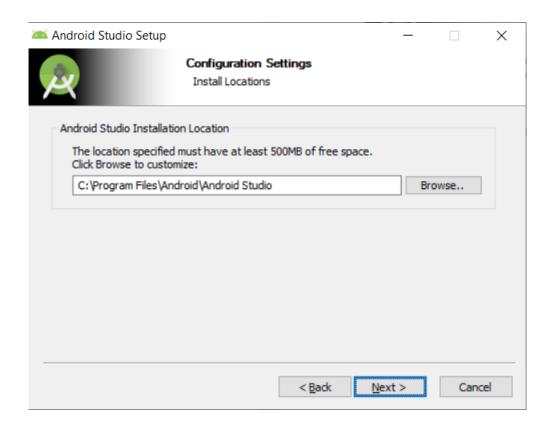
• Download the Android Studio installer. When you launch the installer, you will be greeted with this screen. Click "Next":



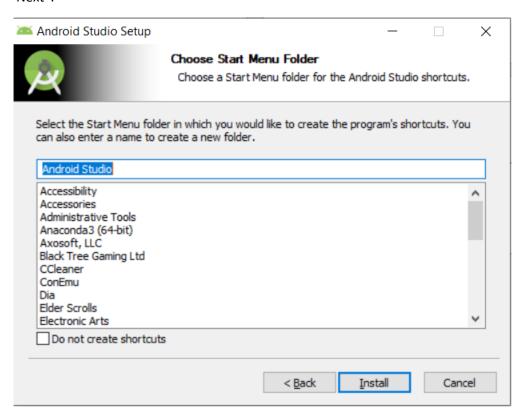
• After clicking next, you will be asked to choose the components to install. Make sure "Android Virtual Device" is selected, and click "Next":



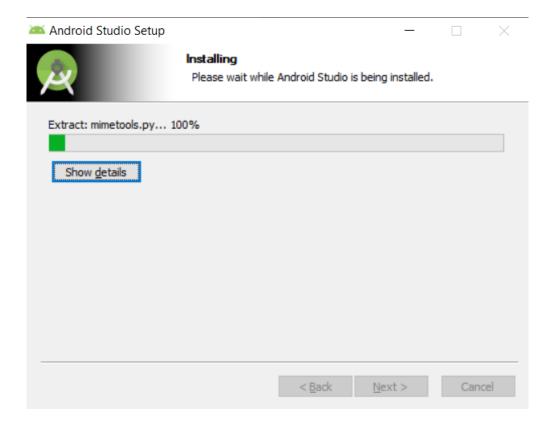
• After clicking next, you will be asked to configure settings. Don't change anything. Click "Next":



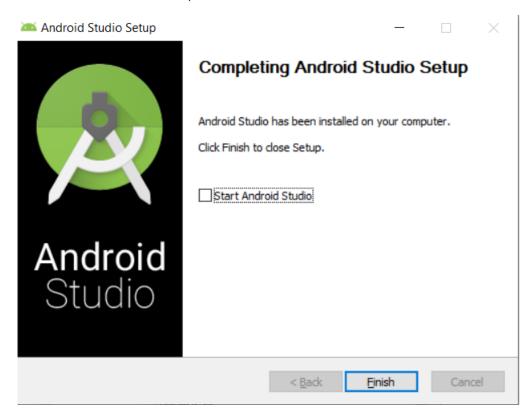
• After clicking next, you will be asked to choose a start menu folder. Keep the defaults. Click "Next":



• After clicking next, the installation process will start:



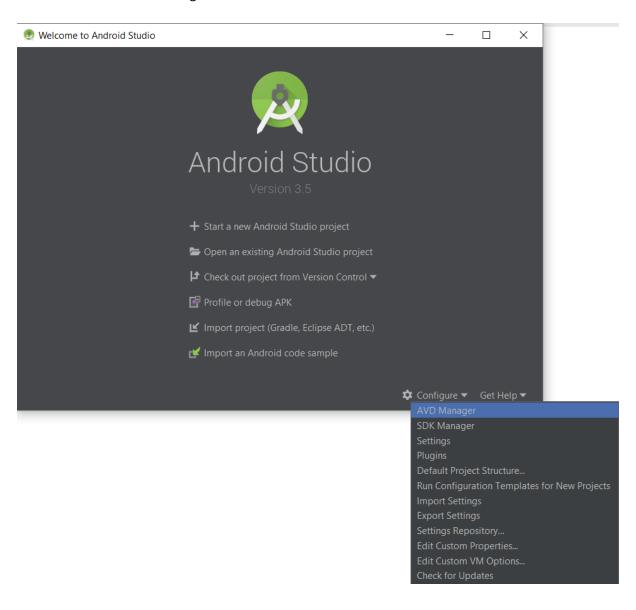
• Once the installation finishes, click "Finish" to close the installer.



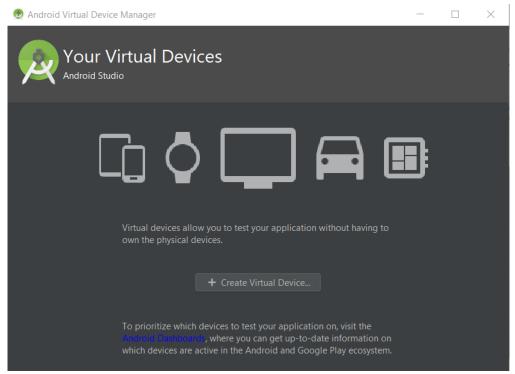
Setting Up Emulator

An android emulator is a piece of software that lets you run android on your PC, as if it is an actual phone. Follow these steps if you do not have an android phone. You will need an internet connection for these steps.

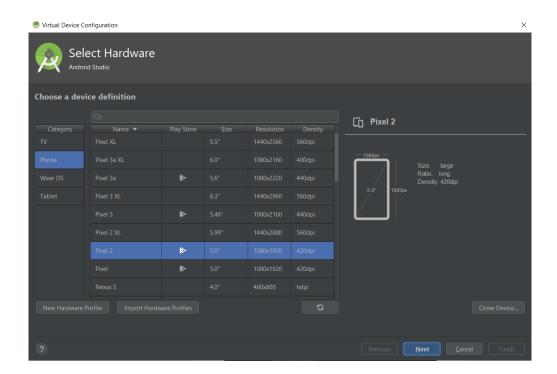
- Open Android studio. If you are opening it for the first time, you will be greeted by couple of screens asking you to choose stuff. There's no need to change anything (unless you know what you are doing). Just keep clicking "Next" and click "Finish" at the end.
- Once it's done, you will be greeted with this screen. Select the "Configure" drop down menu and click "AVD Manager"



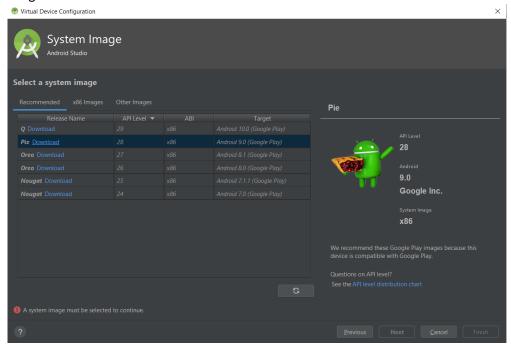
• Click on "Create Virtual Device":



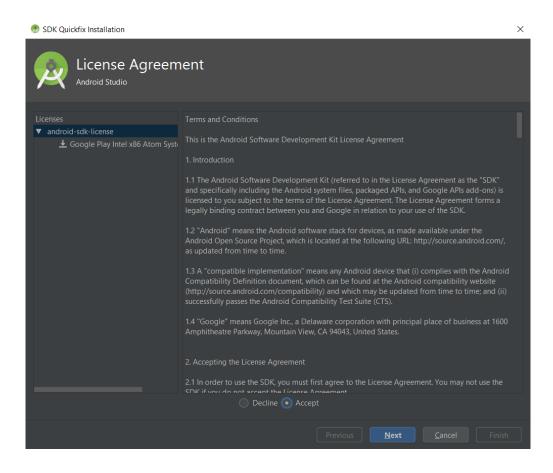
• Select "Phone" Category, and the phone of your choice. Here "Pixel 2" is selected. Click "Next":



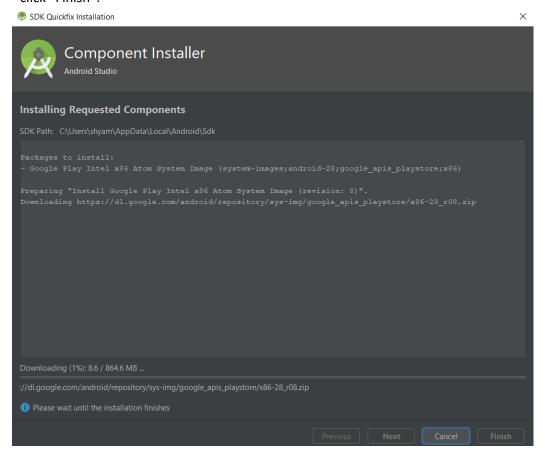
• Now you have to select the system image, the version of android to be used. We will be using android Pie. Click the download button next to "Pie".



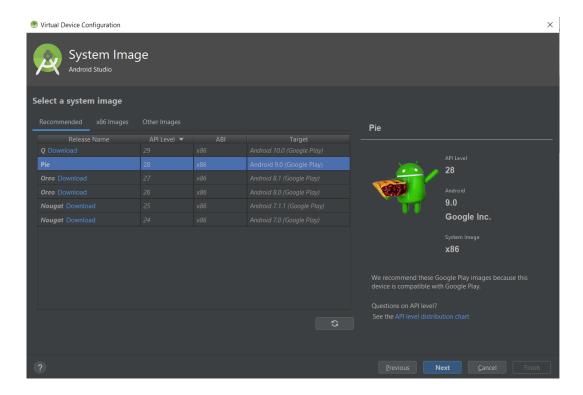
• Accept the license agreement, and click "Next":



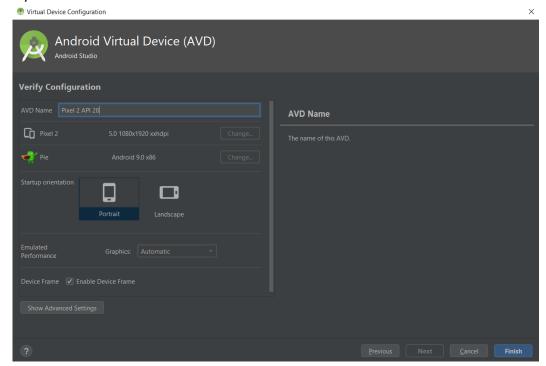
• Once you click "Next", Android Pie will begin downloading: Once the installation has finished, click "Finish":



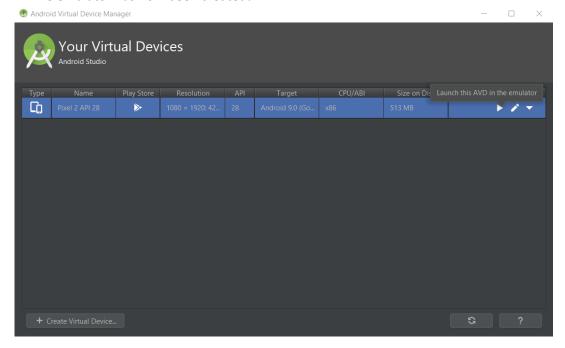
• You will be taken back to the following page. Notice how the download button next to Pie is gone. Make sure Pie is selected and click "Next":



• After clicking next, you will be asked to verify the configuration. Change the emulator name if you want. Click "Finish"



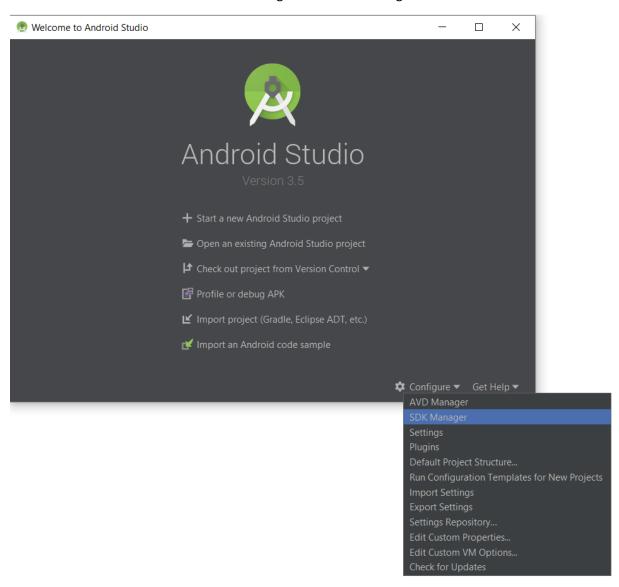
• The emulator has now been created!



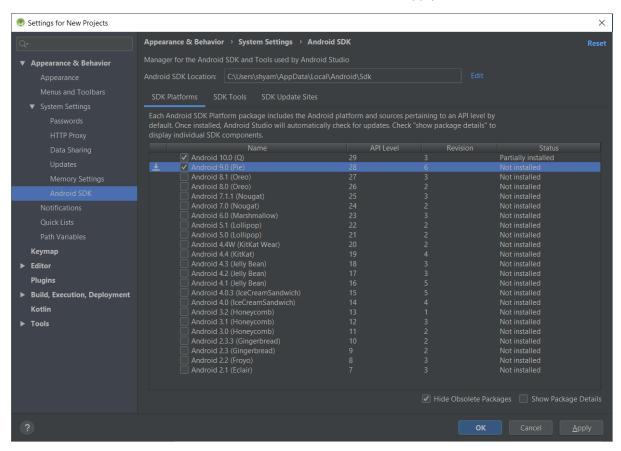
Setting up the Android SDK

The Android SDK is the set of libraries that is required to make android applications. Each version of android has a different SDK. Follow these steps to setup the Android SDK. You need to have an internet connection for these steps

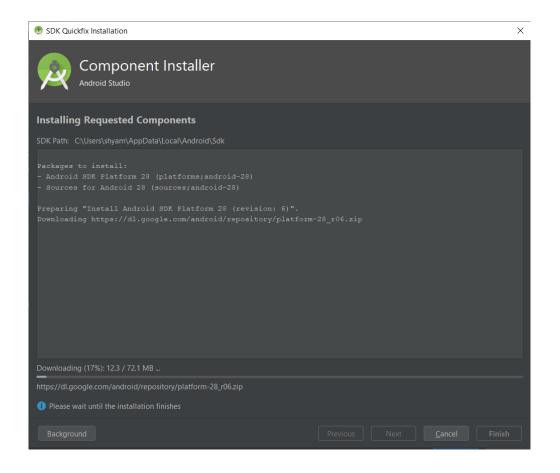
• Launch Android Studio. Select "Configure" → "SDK Manager"



• Select the checkbox next to "Android 9.0 (Pie)" and click "Apply"



• The installation process will start. Once it finishes, click "Finish" and close Android Studio.

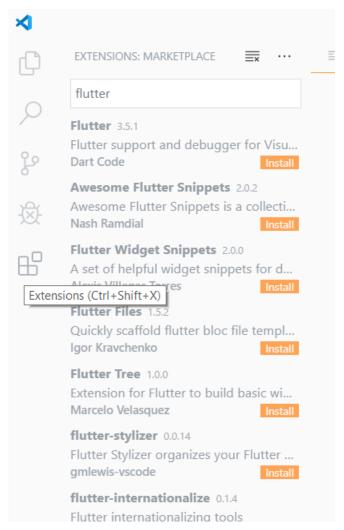


Installing Visual Studio Code (vscode)

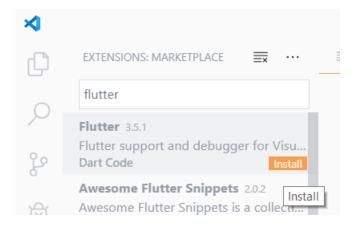
This is straight forward. Go to https://code.visualstudio.com/ and download it. Click "Next" a bunch of times and click "Finish" at the end.

Installing the Flutter plugin for Visual Studio Code

• Open vscode. Click on the "extensions" icon on the left tab bar and search for flutter:



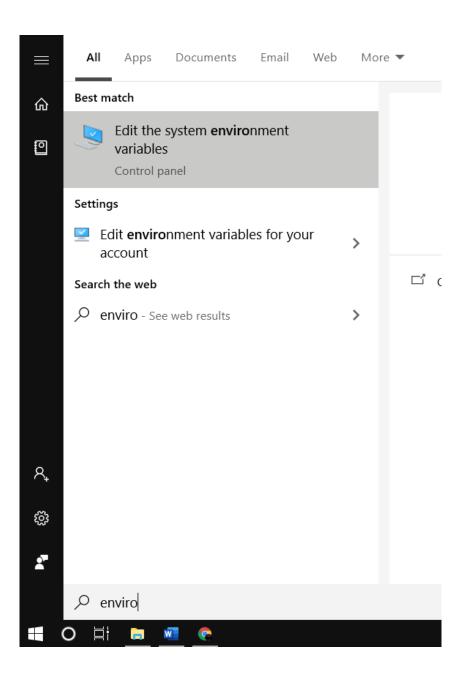
After the search results pop up, click on install next to the "Flutter" extension. The extension will install.



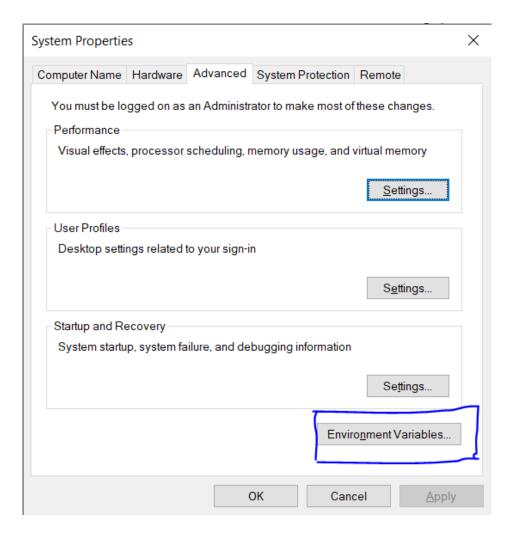
Installing Flutter

Finally. Follow these steps to install Flutter on windows. You need internet for these steps:

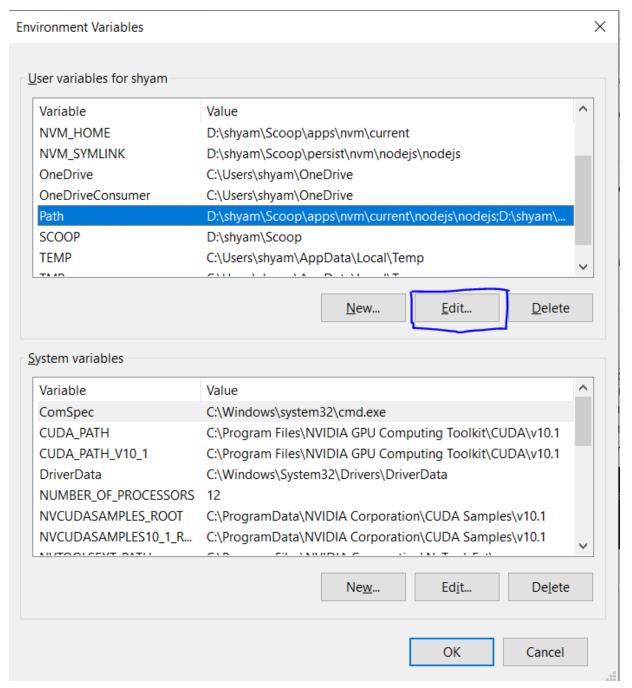
- Download <u>flutter</u>. Extract the zip file, and place the folder named 'flutter' inside the
 extracted folder in 'C:\<your user name>'. After this step, the path to the flutter folder
 should be `C:\<your user name>\flutter>`
- Open start menu and type "environment variables". Select the option "Edit the system's environment variables"



• Select "Environment Variables" button

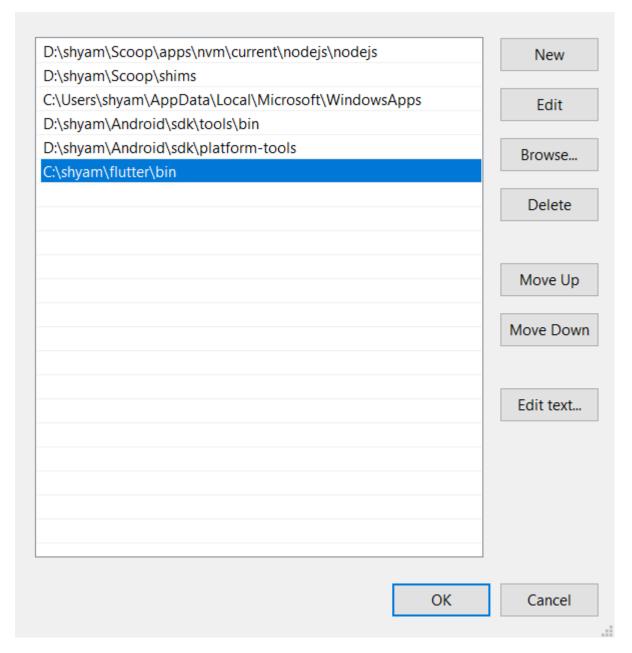


Under "User variables", Select "Path" and click "Edit"



• Select the "New" button. Type the path "C:\<your user name>\flutter\bin" and press enter. The result should look something like this:

Edit environment variable X



• Select Ok. Open command prompt by typing "Win+R" and then "cmd". Type the command flutter doctor -v and press enter. The output should be something like following. If you get such an output, then flutter has been successfully installed!

```
::\Users\shyam>flutter doctor -v
√] Flutter (Channel stable, v1.9.1+hotfix.4, on Microsoft Windows [Version 10.0.17763.737], locale en-IN)
    • Flutter version 1.9.1+hotfix.4 at D:\shyam\Flutter
   • Framework revision cc949a8e8b (6 days ago), 2019-09-27 15:04:59 -0700
   • Engine revision b863200c37
    • Dart version 2.5.0
[V] Android toolchain - develop for Android devices (Android SDK version 29.0.2)

    Android SDK at D:\shyam\Android\sdk

    Android NDK location not configured (optional; useful for native profiling support)

   • Platform android-28, build-tools 29.0.2
   • ANDROID_SDK_ROOT = D:\shyam\Android\sdk
   • Java binary at: C:\Program Files (x86)\Common Files\Oracle\Java\javapath\java.exe
    • Java version Java(TM) SE Runtime Environment (build 1.8.0_221-b11)

    All Android licenses accepted.

[!] Android Studio (not installed)

    Android Studio not found; download from https://developer.android.com/studio/index.html

     (or visit https://flutter.dev/setup/#android-setup for detailed instructions).
[√] VS Code, 64-bit edition (version 1.38.1)

    VS Code at C:\Program Files\Microsoft VS Code

    • Flutter extension version 3.5.1
[!] Connected device
   ! No devices available
 Doctor found issues in 2 categories.
:\Users\shyam>
```

• Under "Android toolchain" in the output, in case you see something like "Android licenses not accepted. Run flutter doctor --android-licenses", type the command flutter doctor --android-licenses. Press "Y" when prompted.

Creating a flutter project

- Open Visual Studio Code. Press "Ctrl+Shift+P" and type "flutter:new project" and press enter. You will be prompted to type the project name and save location. Choose them and press enter. Make sure you are connected to the internet for this step.
- Once the project has been created, connect your android device (if available) and press
 F5. For android users, select your phone in the dropdown menu that occurs. For iOS users, select the emulator to launch.