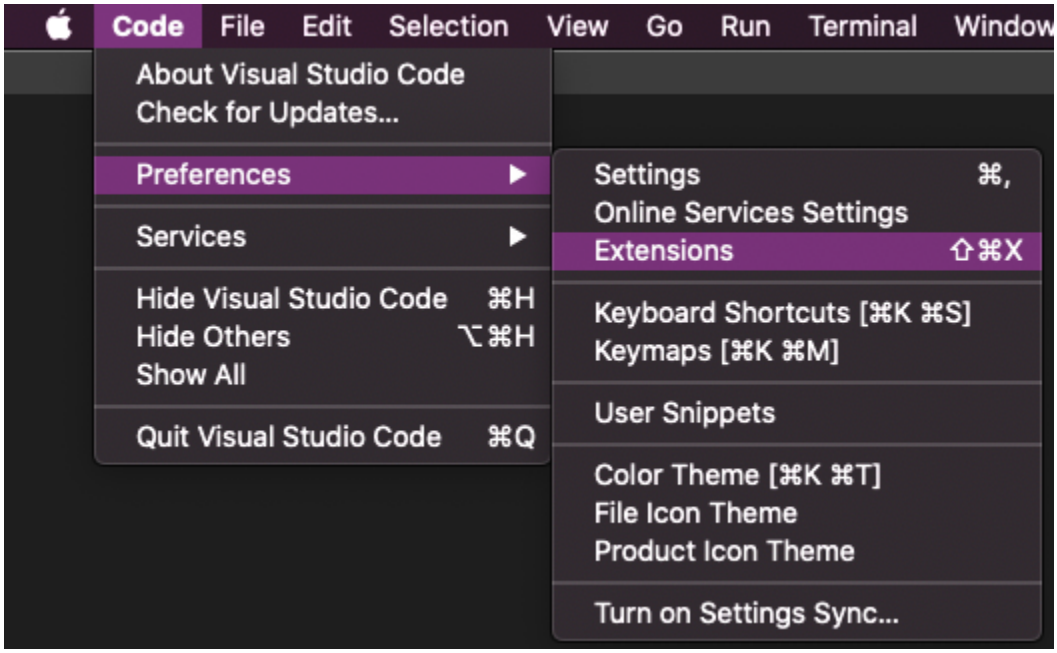
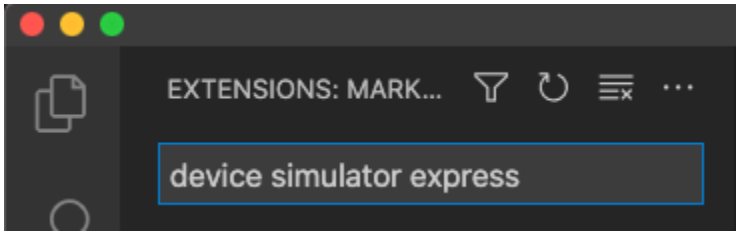
Install Device Simulator Express in Visual Studio Code

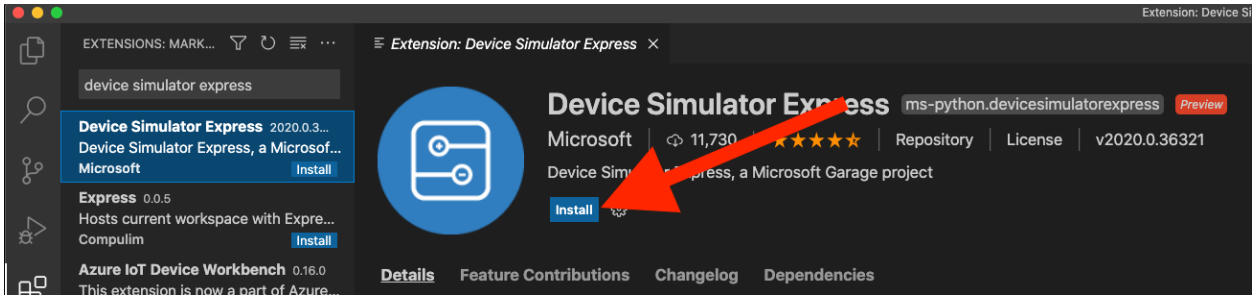
1. Install VS Code - https://code.visualstudio.com/download
2. Open VS Code.
3. Find “Extensions”. You can use the Command Palette (on MacOS, you can use CMD+shift+P; on Windows, CTRL+shift+P), or menu options. On MacOS, it’s **Code -> Preferences -> Extensions**.



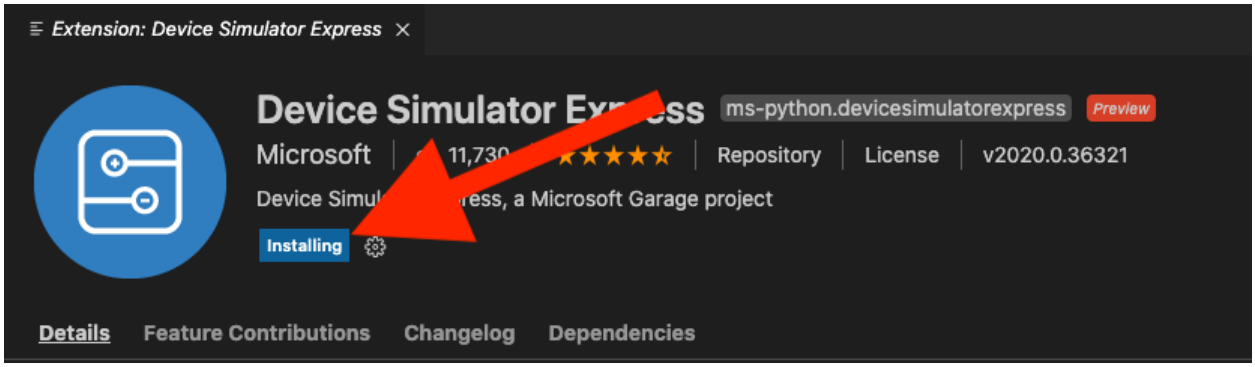
4. Search for “Device Simulator Express”.



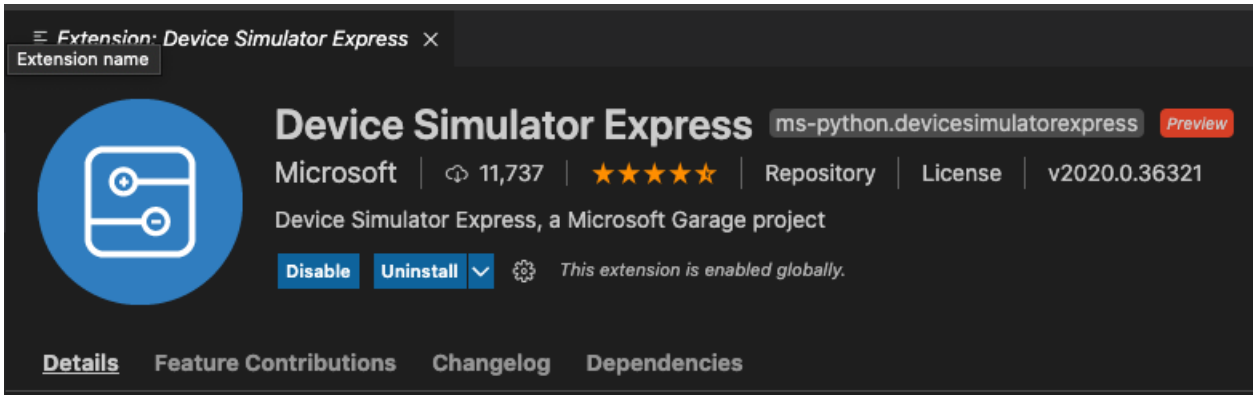
5. Click on “Device Simulator Express” in the list. Click “Install”.



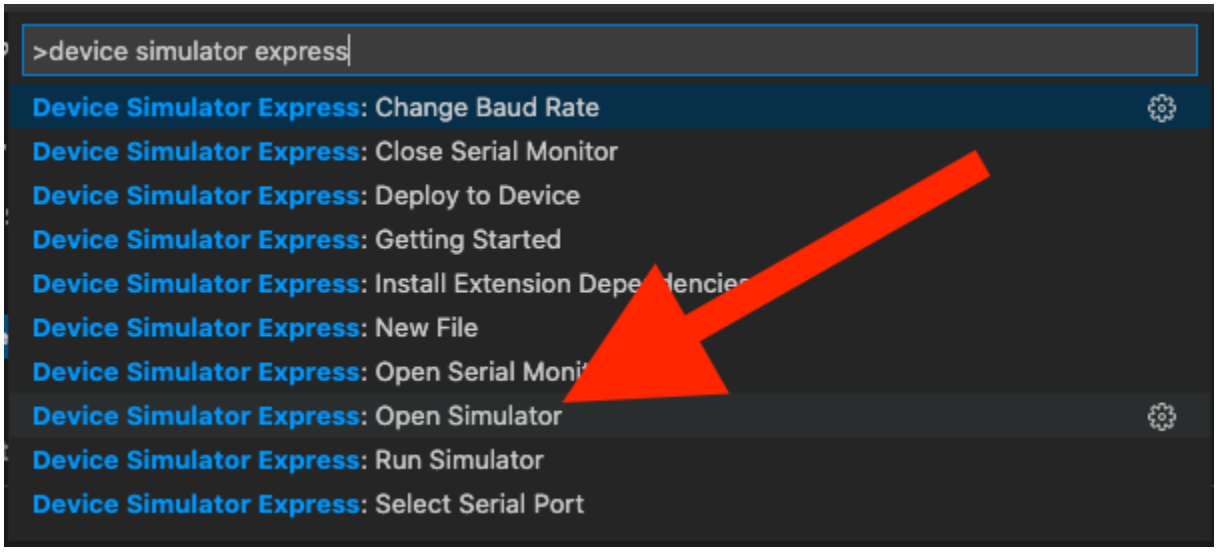
6. Let VS Code install the extension. It will say “Installing” until it is complete.



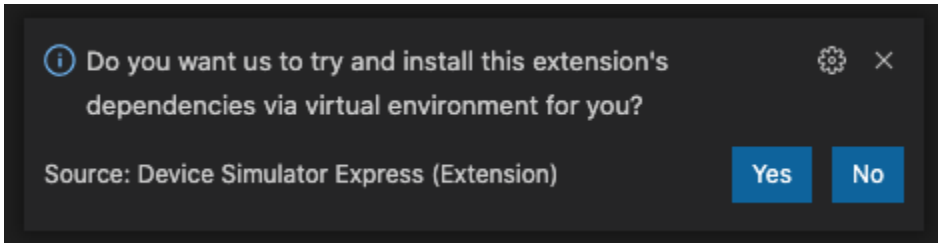
7. Once complete, you’ll see the following.



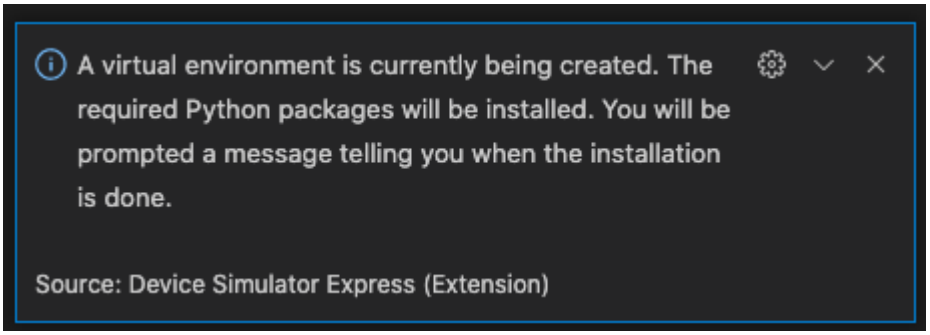
8. Open the Command Palette (CMD or CTRL + shift + P). Search for “Device Simulator Express”. Click “Device Simulator Express: Open Simulator”.



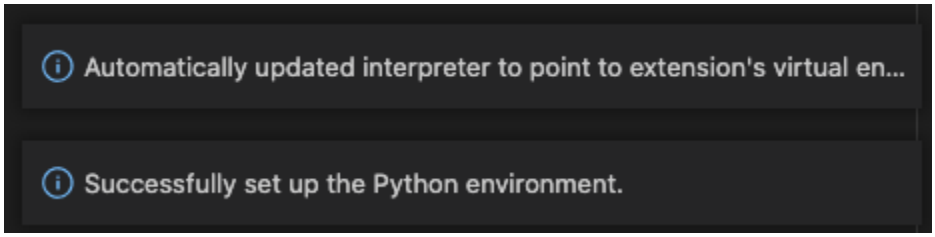
9. If it offers to create a virtual environment to install dependencies, click “Yes”.



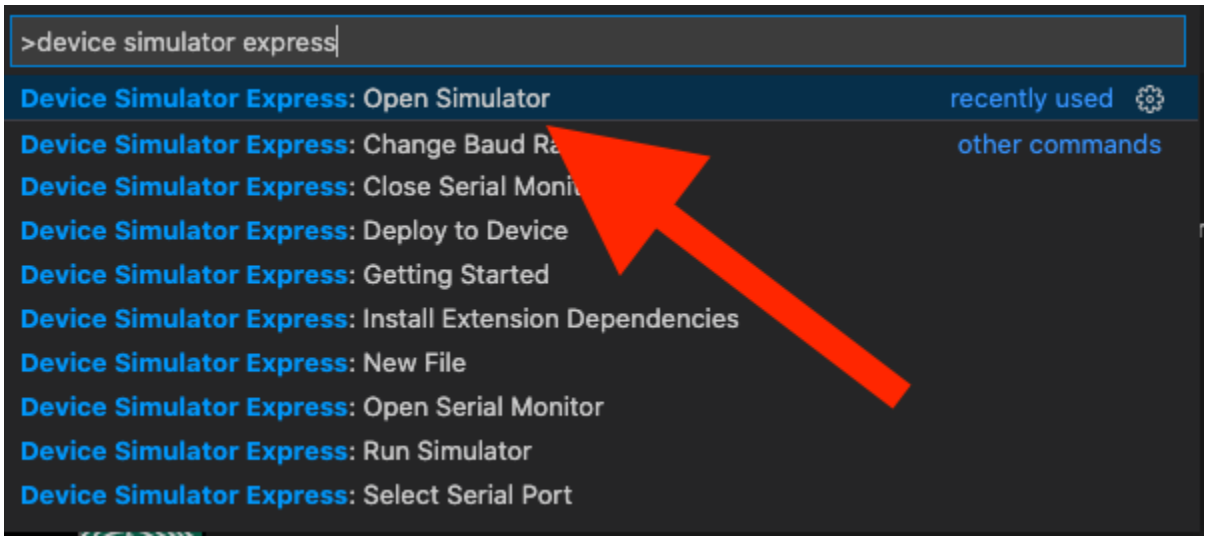
10. You’ll see the following notification. Wait for the dependencies to install. This can take some time!



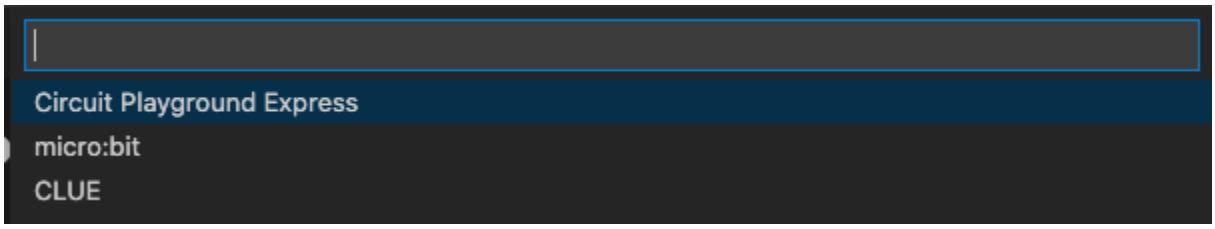
11. Once installed, the following notifications will appear.



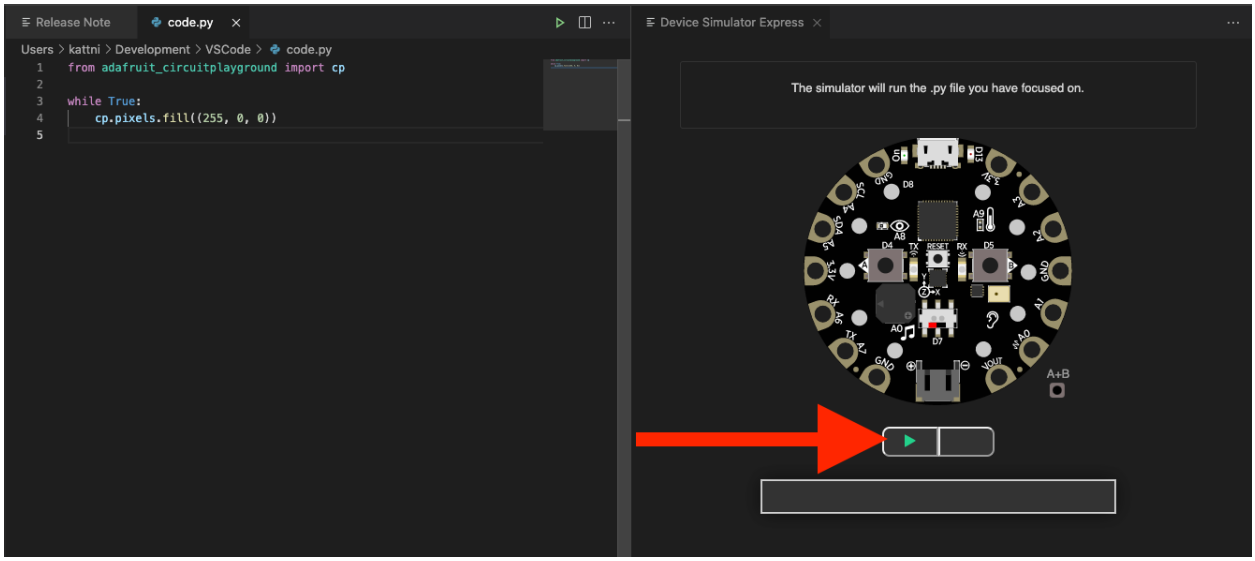
12. Open the Command Palette again, search for “Device Simulator Express”, and click “Device Simulator Express: Open Simulator”.



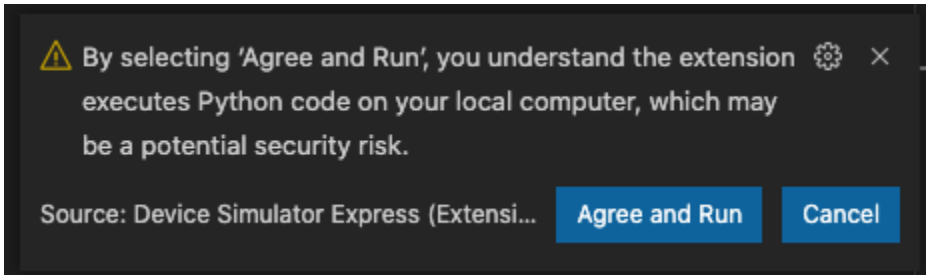
13. Choose “Circuit Playground Express” or “CLUE” depending on which board you would like to simulate. You can easily switch between them to see what they are.



14. Create a new file, save it as code.py. Add some CircuitPython code applicable to the board you chose, and then click the green arrow to see your code run.



15. The **FIRST TIME ONLY** that you click the green arrow, Visual Studio Code will display a notification verifying that you intended to run the extension. Click “Agree and Run”.



There appear to be some issues with the interface showing button labels. The green arrow button runs the code, and clicking the same button again to “stop” running the code. The bar below the “Run” button should have a series of buttons on it that show you each of the features of the board included in the Simulator. You can still click the buttons, though no image appears for the button. Feel free to explore!