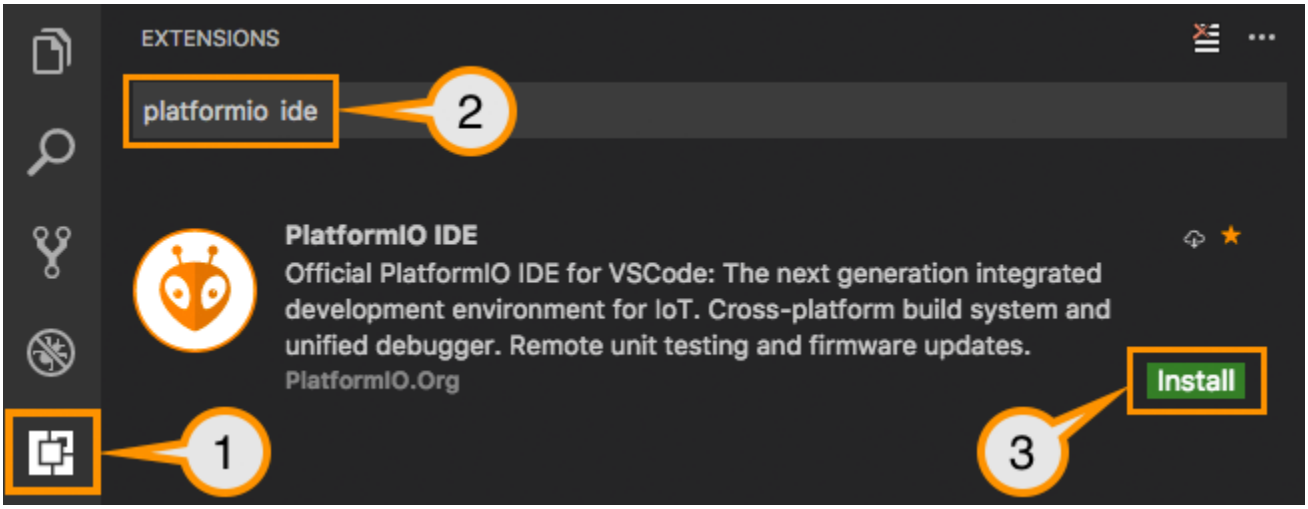
Lab 0: Getting Started

Requirements:

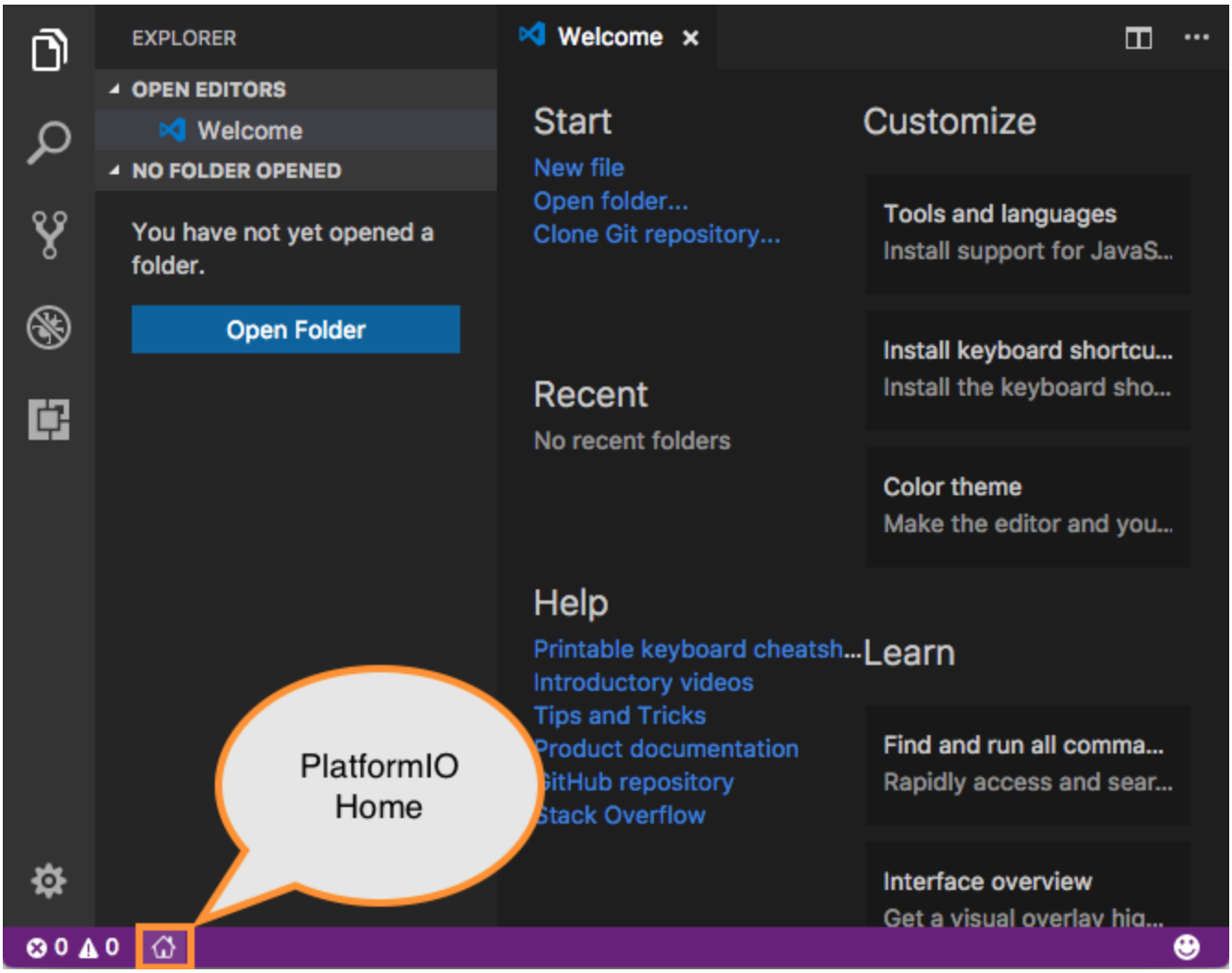
- PlatformIO
- Visual Studio Code

Windows:

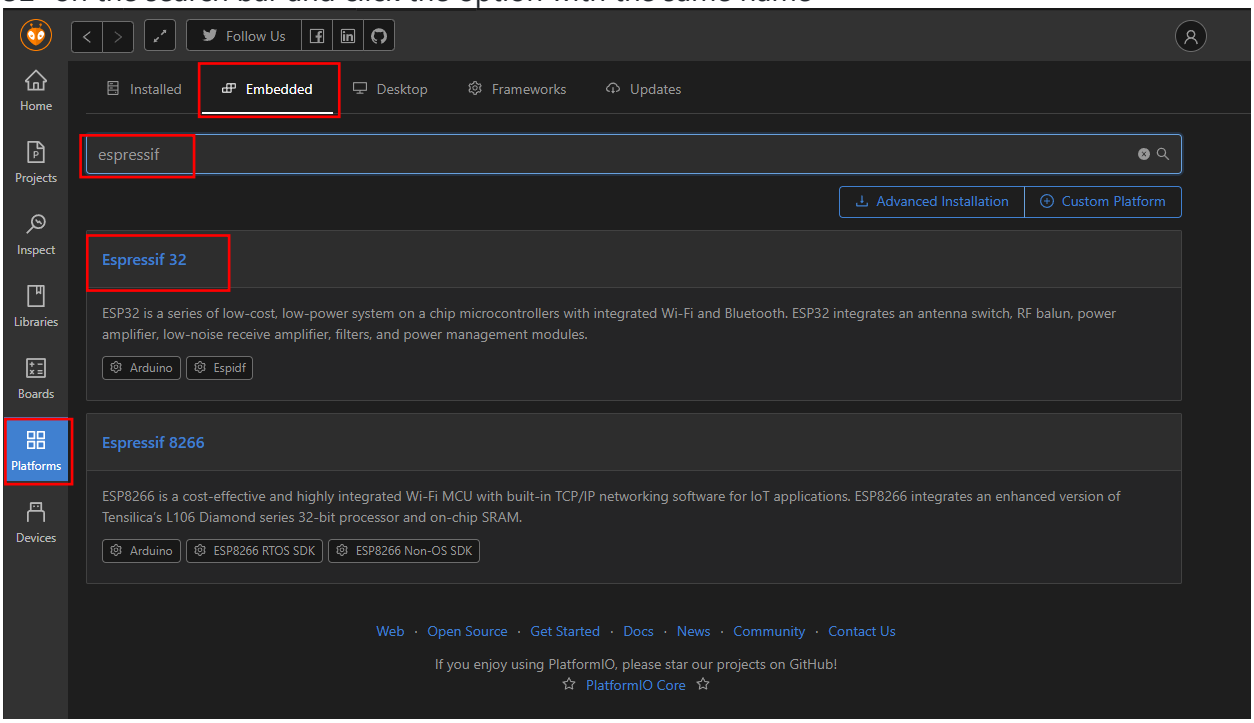
1. If you have not already download and install Visual Studio Code (VSCode) for Windows here.
2. After you have installed VSCode you need to install the PlatformIO extension.
    a. Open VSCode extension manager.
    b. Search for the official `platformio ide` extension.
    c. Install PlatformIO IDE.



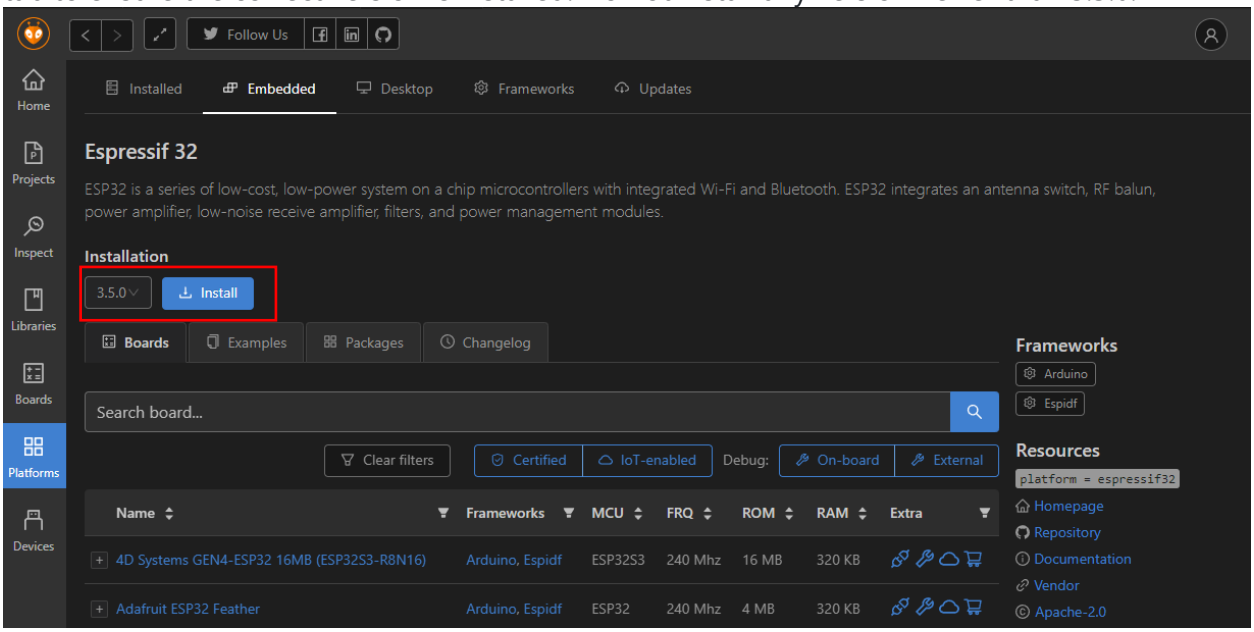
3. After installing the platformio extension you may need to exit VSCode and reopen it, regardless if you receive a prompt or not I would suggest doing that now.
4. Reopen VSCode.
5. PlatformIO may or may not automatically open if it does not simply click the home button.

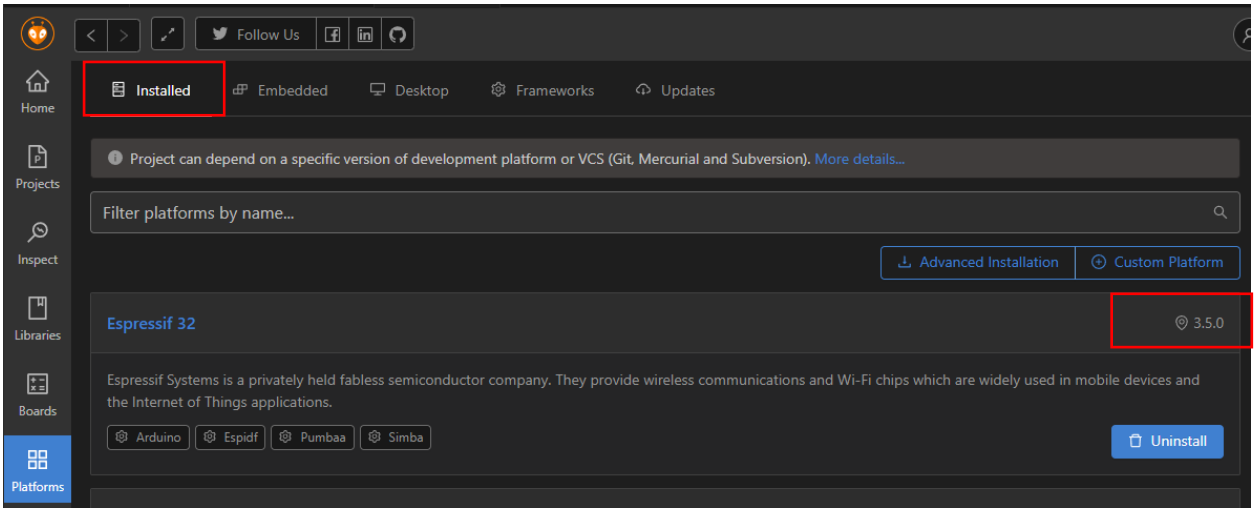

EXPLORER
OPEN EDITORS
Welcome
NO FOLDER OPENED
You have not yet opened a folder.
Open Folder
Welcome
Start
New file
Open folder...
Clone Git repository...
Recent
No recent folders
Help
Printable keyboard cheatsh...
Introductory videos
Tips and Tricks
Product documentation
GitHub repository
Stack Overflow
Customize
Tools and languages
Install support for JavaS...
Install keyboard shortcu...
Install the keyboard sho...
Color theme
Make the editor and you...
Learn
Find and run all comma...
Rapidly access and sear...
Interface overview
Get a visual overlay hig...
PlatformIO Home
0 0

6. On the PlatformIO sidebar, click on Platforms and then Embedded. Search for “espressif 32” on the search bar and click the option with the same name

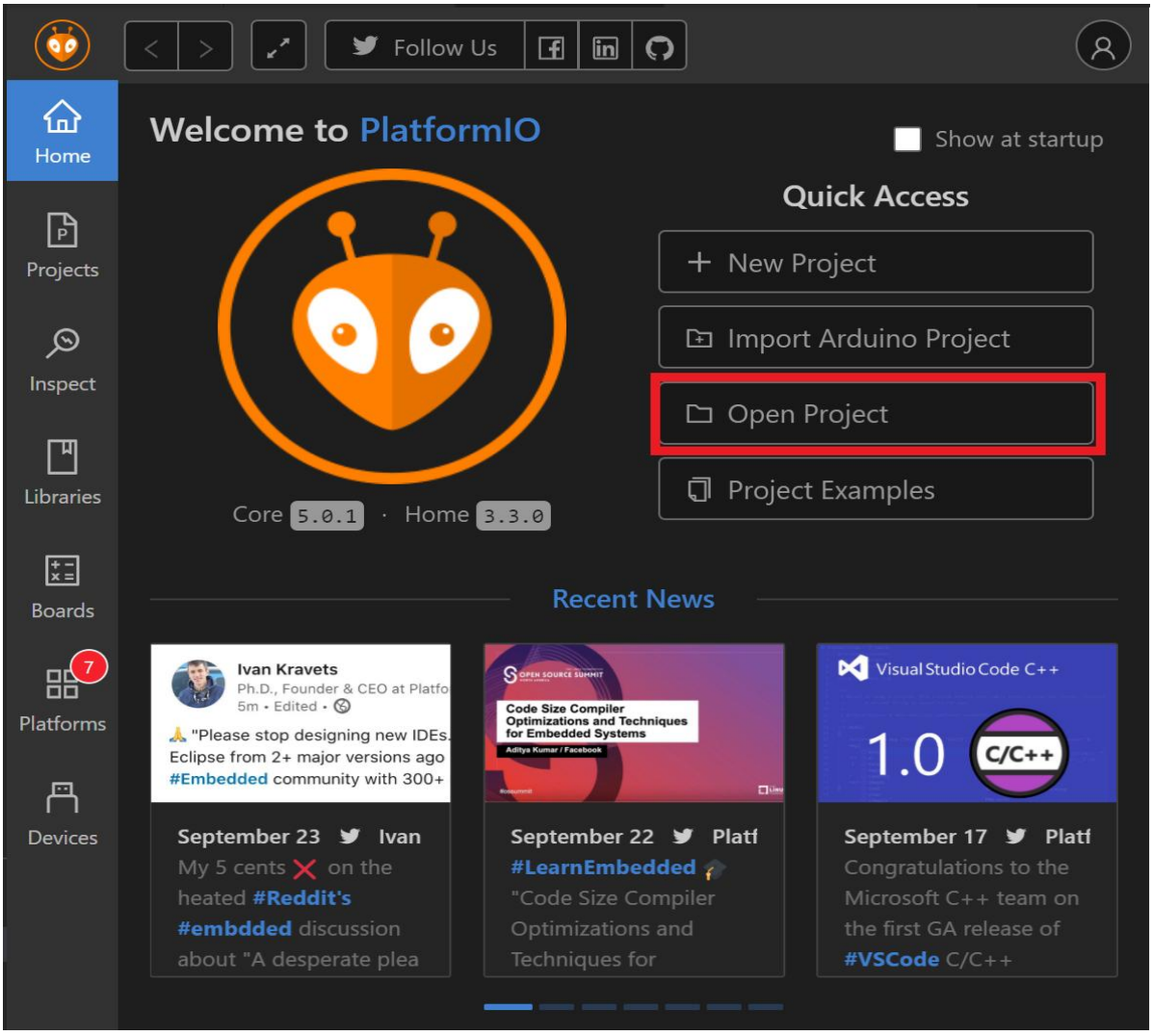


7. Select version 3.5.0 and install it. Once the installation is complete, check the Installed tab to ensure the correct version is installed. Do not install any version newer than 3.5.0.

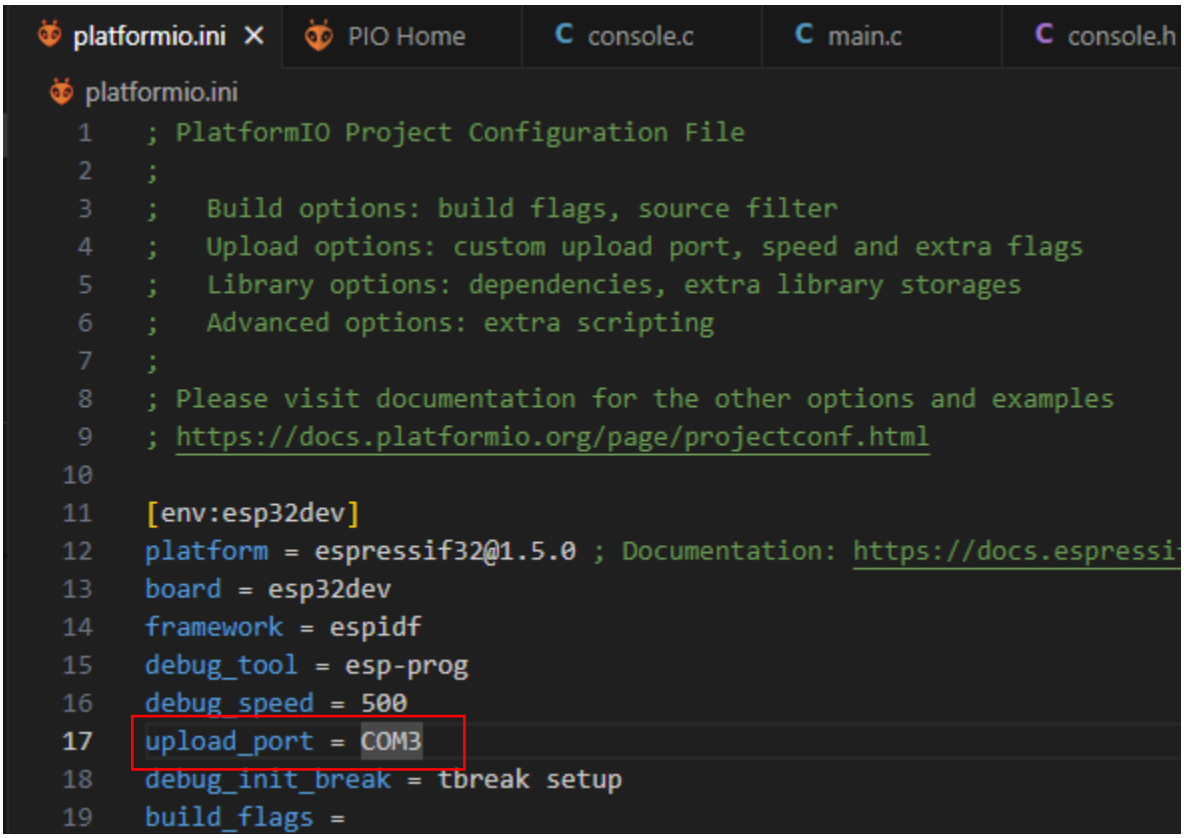




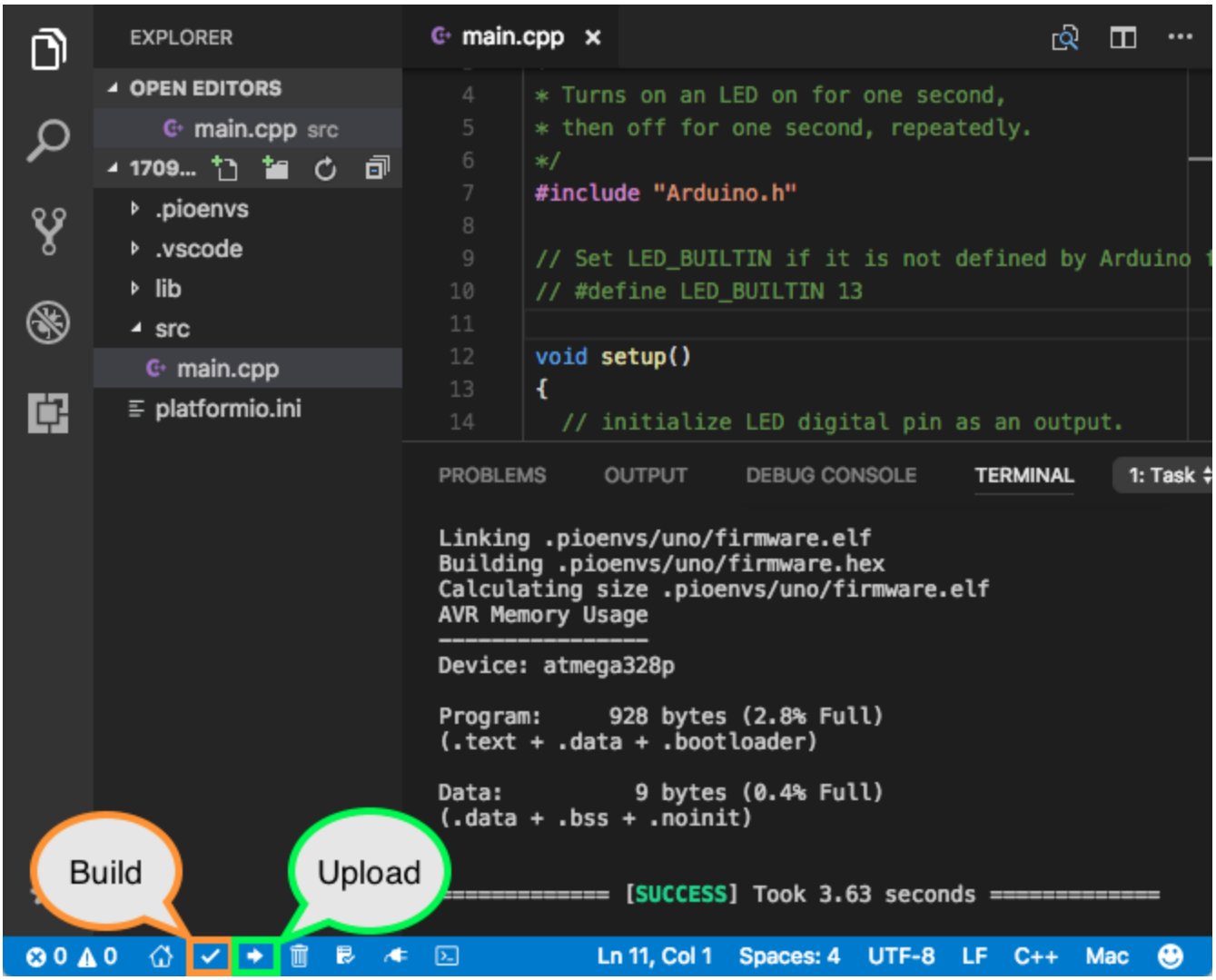
8. Now on the home screen click open project.



7. Navigate to the place where you cloned this project and open the `iot_labs` folder, ***make sure there is no whitespace in the path to this project.***
8. Locate the file called "platformio.ini". You will need to modify the upload port to match the one your computer assigns the board when plugged in.



9. Everything else should already be configured for you to build simply hit the build button and make sure you do not get any errors.
    1. You may need to install drivers to upload to your board https://www.silabs.com/developers/usb-to-uart-bridge-vcp-drivers
    2. If you receive an error saying "package espidf@3.30101.0 not found" please download the framework-espidf@3.30101.0.zip found on Canvas and extract its contents into the ".platformio/packages" folder. The location of the ".platformio" folder will depend on your install location. The default location for Windows machines would be "C:\Users\<username>\.platformio\packages".



10. Once you have successfully uploaded the project to the board, please submit a video of the board showing temperature and humidity, date (It does not need to be the correct time or date) and the LED lights flashing in a binary sequence order on Canvas.