

There are 3 Intel DevCloud personas – FPGA, oneAPI, and IOT. The FPGA one gives you access to both the FPGA and the oneAPI nodes. We are having you sign up for the FPGA persona so that you will have access to a wider set of resources.

However, it does make logging in to the oneAPI cloud a little more complicated (but it's not too bad! Just more complicated than instantaneous 😊). These instructions will walk you through it.

Go to the following link and sign up for an Intel® DevCloud account.

<https://intelsoftwaresites.secure.force.com/fpgadevcloud>

(If you are not sure for an answer on the form, just pick any choice. Your answers will not affect your sign-up.)

The form you are filling out should look like the screenshot below.

The screenshot shows the Intel DevCloud sign-up page for FPGA Acceleration. The page has a blue header with the Intel logo and navigation links: PRODUCTS, SUPPORT, SOLUTIONS, DEVELOPERS, and PARTNERS. Below the header is a breadcrumb trail: Software / Tools / DevCloud > / FPGA > / Get Access. The main heading is "Sign Up for FPGA Acceleration with Intel® DevCloud". Below this is a form with the following fields and options:

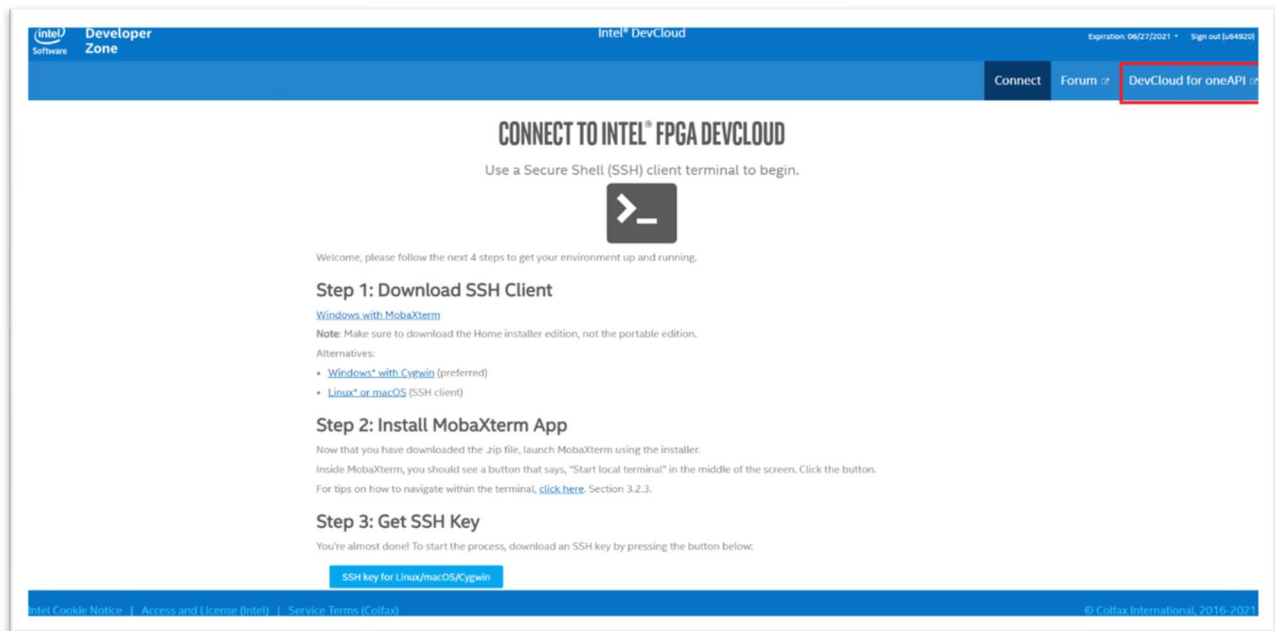
- First Name (text input)
- Last Name (text input)
- Please select a country/region (dropdown menu)
- Business Email (text input)
- Company or Academic Institution (text input)
- Are you a part of the Intel® FPGA Partner Program? (optional) (radio buttons for Yes and No)
- Are you a part of the Intel® FPGA Academic Program? (optional) (radio buttons for Yes and No)
- *Which Intel FPGA device does your project target? (dropdown menu with "Select an Option")
- *Which software tools do you intend to use with your project? (dropdown menu)

Read and accept the terms and conditions.

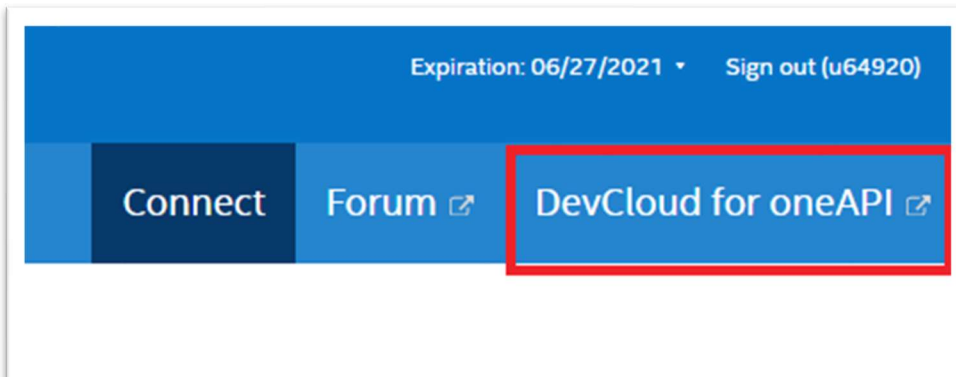
The screenshot shows the Intel DevCloud welcome page. At the top, it says "WELCOME" in large letters. Below that, it says "Intel® DevCloud is preinstalled with the latest Intel® hardware, frameworks, tools, and libraries." In the center, there is a box titled "Read and Accept Terms and Conditions". Inside this box, it says: "By accessing this site and the cloud computing services that it provides, you acknowledge and accept the following:" followed by two bullet points: "Intel DevCloud Access and Software License Agreement" and "Colfax Services Terms". Below these bullet points, there is a checked checkbox and the text "I, Susannah Martin, accept these terms." At the bottom of the box is a blue "Submit" button.

(Continue to next page for more instructions.)

After you have accepted the terms and conditions, you will see the following screen. On this screen, click “DevCloud for oneAPI” at the top right. It has a red box drawn around it in the screenshot below.



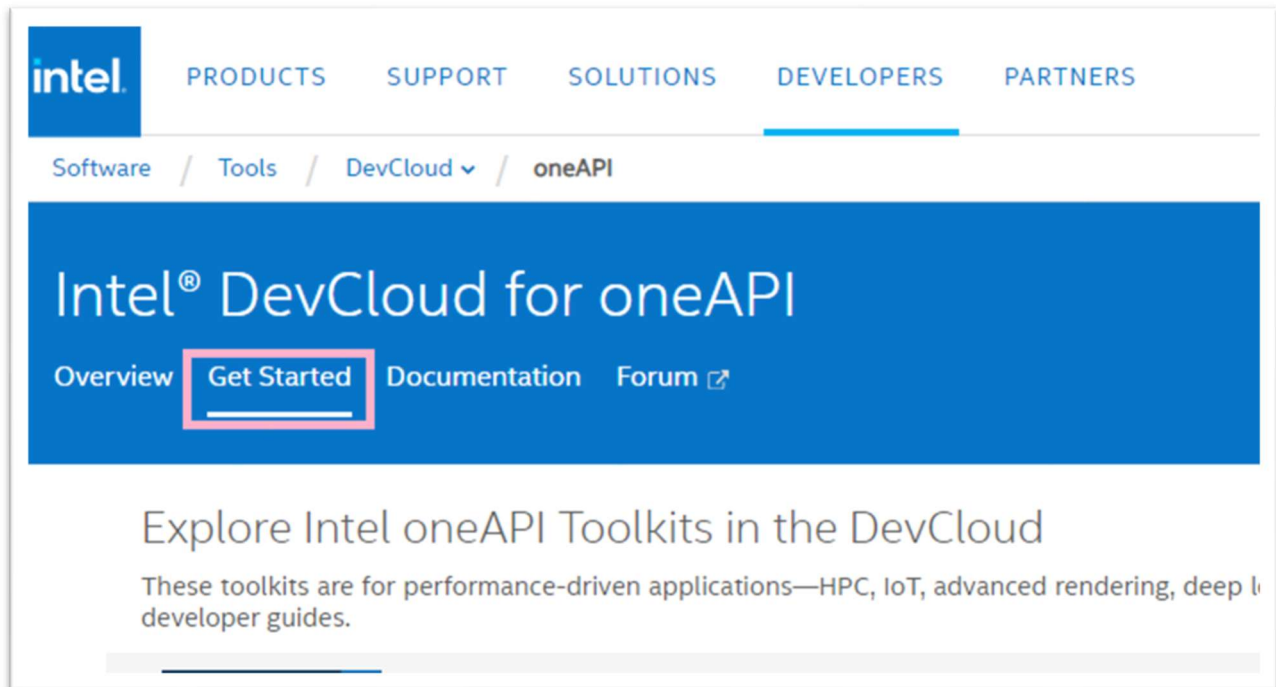
Here is a close-up of what you need to click at the top right:



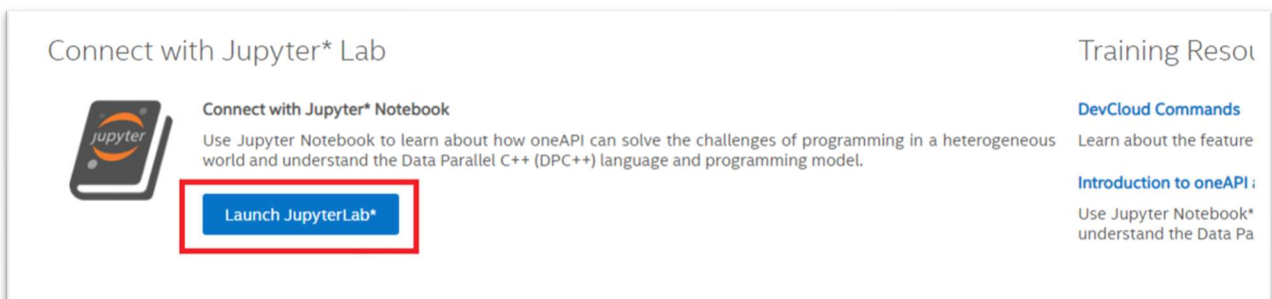
(Note: If you have previously signed up for the DevCloud, look for your Welcome email, which will be titled with a subject similar to “Welcome to Intel® DevCloud – Start Coding in Minutes.” Click the Unique Access URL within that email to get to the website shown above.)

(Continue to the next page for more instructions.)

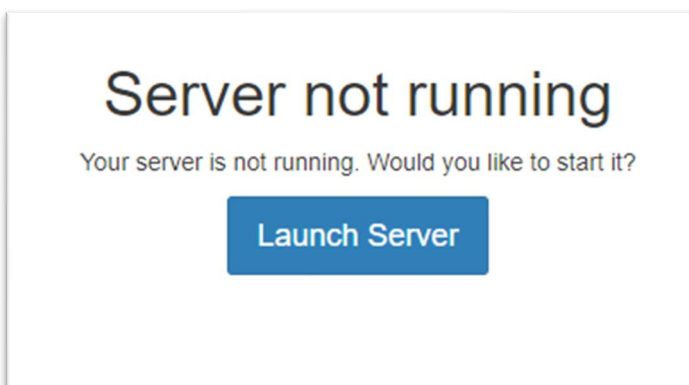
On the next screen, click “Get Started.”



Then, scroll to the bottom and click “Launch JupyterLab*”



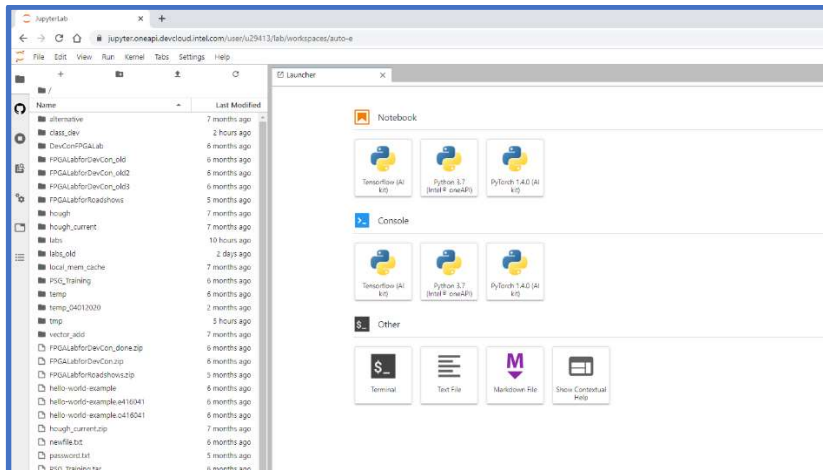
If you are prompted to Launch Server, click Launch Server. If you are asked which server, choose the one associated with oneAPI in parentheses.




(Continue to the next page for more instructions.)

If at any point, you are asked to sign in and need your UUID, it can be obtained from the email sent to you when entitled “Welcome to Intel® DevCloud – Start Coding in Minutes.” (or something similar if you signed up in the past.) Your UUID will be in that email as the UUID Key.

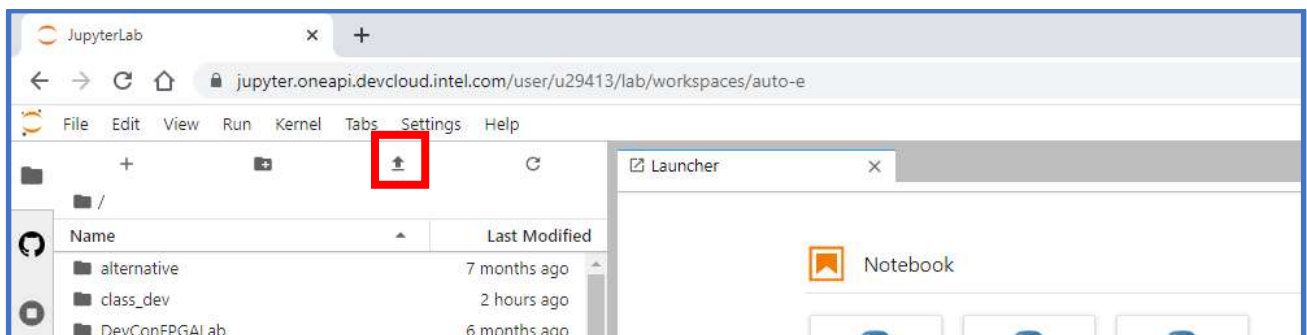
You should now see an interface similarlike the one below. It may have a Jupyter notebook open in the main panel, which is fine.



First, you need to upload the lab files to your DevCloud account. When you unzipped the file oneAPILabs.zip, one of the files it contained was labs.zip. We will now upload that to the Jupyter Lab environment.

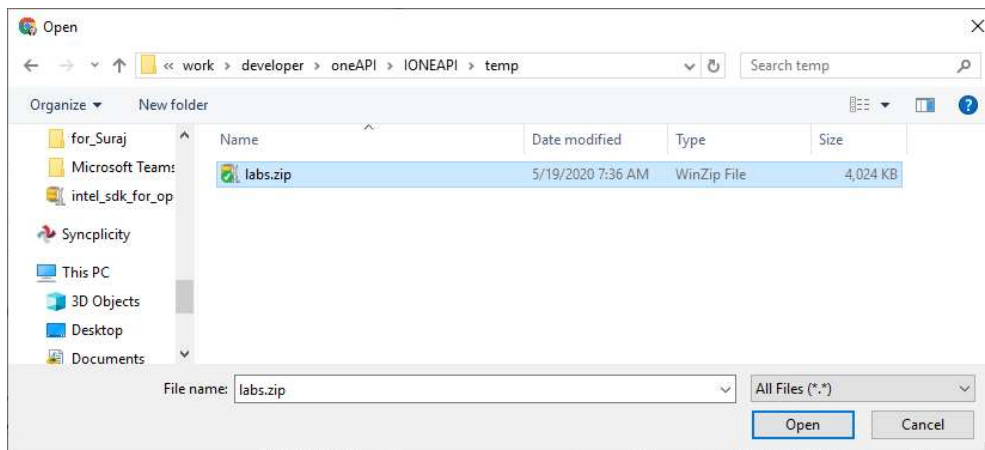
At the top left of the Jupyter lab environment above the file browser, there is a button that looks like this: 

I have drawn a box around where that button is in the screenshot below. Click that button now. It is for uploading files to your DevCloud account.

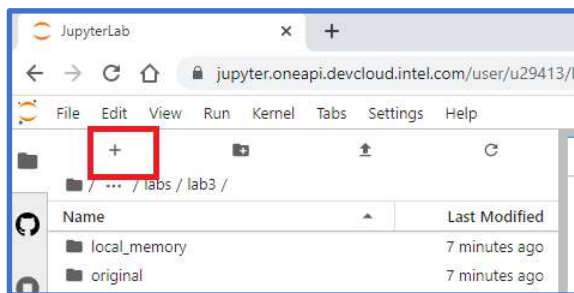


(Continue to the next page for more instructions.)

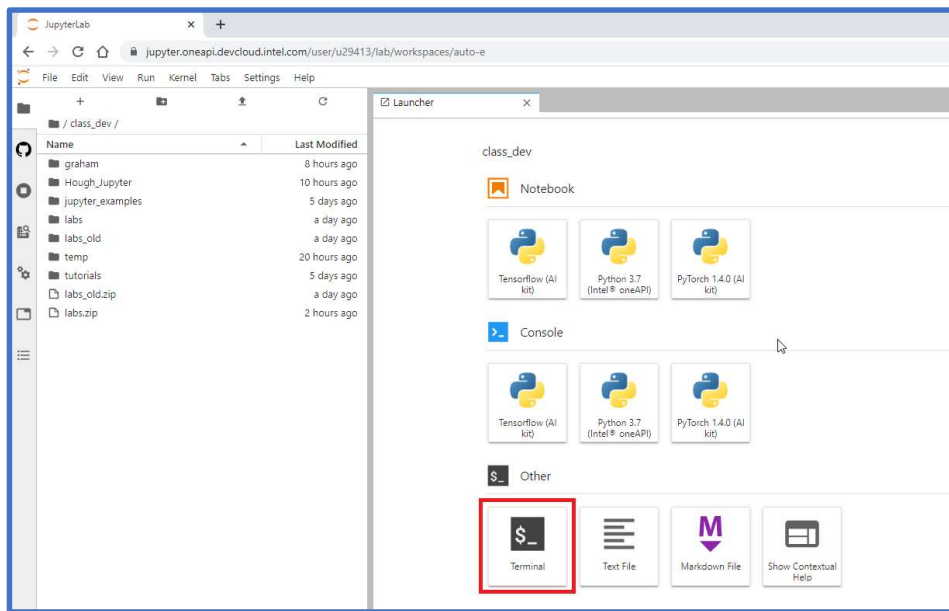
Browse to the labs.zip file that was part of the zip file you downloaded for the class, and click Open.



Next, you will need to launch a terminal and unzip the file labs.zip using the terminal prompt. If you do not see the Launcher tab in the main panel, click the “+” button at the top left of Jupyter Lab, and a Launcher tab will open. The “+” button is shown below.



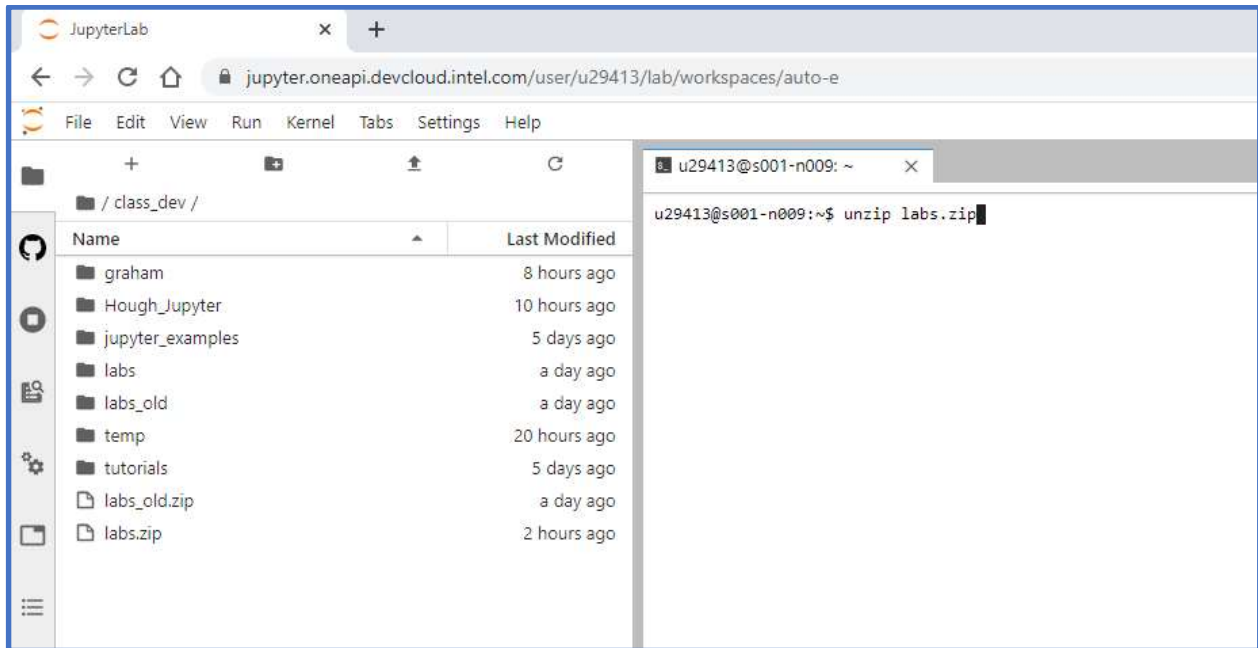
You should see a launcher as the main panel as shown below. Click the Terminal icon at the bottom left.



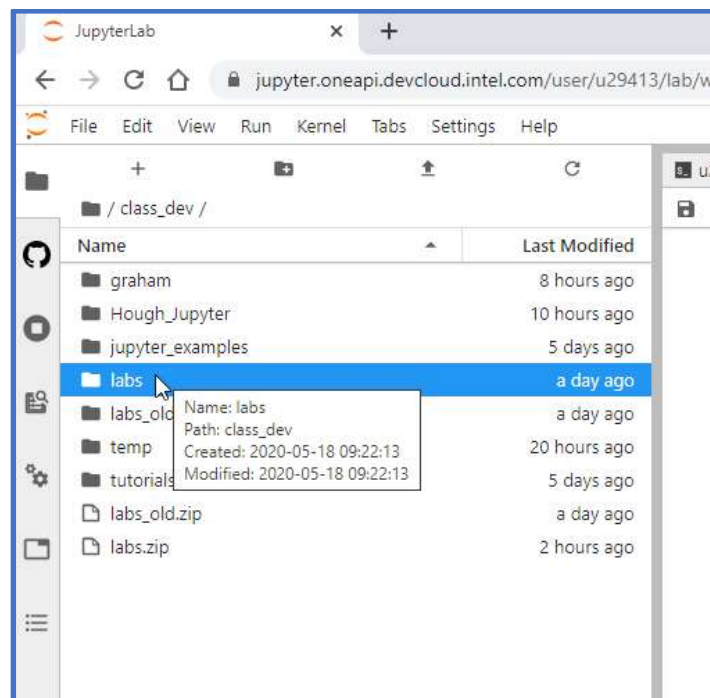
(Continue to the next page for more instructions.)

You will now have a terminal inside your Jupyter Lab environment (yours is probably black). Click near the prompt to make the terminal active and where you can type a command.

Type `unzip labs.zip` at the prompt. This will unzip the lab files to your directory.



After a moment, the file browser at the left will update and show the `labs/` folder you just unzipped. Double-click that folder now.



Now, proceed to follow the instructions in `lab3/Hough_transform_lab.pdf`.