


ITEC 1150 Week 1

Lab Projects

PYCHARM SETUP AND FIRST FILE

PyCharm Download

- ▶ We will write our Python programs in this application
- ▶ Go to jetbrains.com/pycharm/download
- ▶ Scroll down to find PyCharm Community Edition
 - ▶ Don't download PyCharm Professional – that's a paid application and has far more features than we will need for an introductory class.
- ▶ Download and run the installer



PyCharm Professional
The Python IDE for data science and web development

Download .exe (Windows) ▼

Free 30-day trial

A red prohibition sign (a circle with a diagonal line) is overlaid on the PyCharm Professional download button, indicating that this version should not be downloaded.



PyCharm Community Edition
The IDE for Pure Python Development

Download .exe (Windows) ▼

Free, built on open source

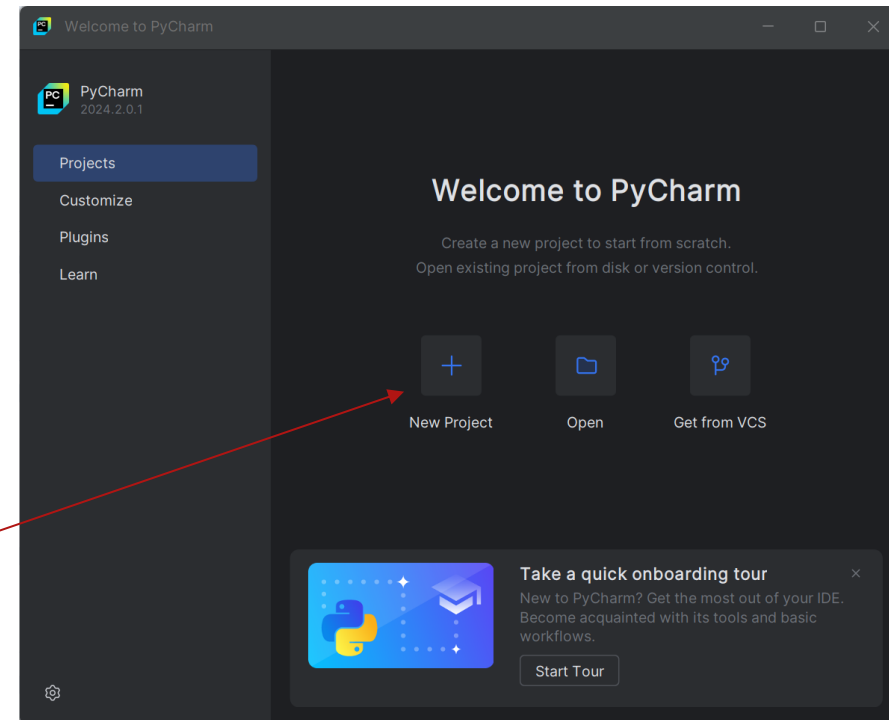
A green checkmark is overlaid on the PyCharm Community Edition download button, indicating that this version is the correct one to download.

Windows "S" Mode

- ▶ If you're using a personal laptop and receive an error like "This mode of Windows only runs Microsoft-verified apps" when running the installer, your laptop may have been sold running Windows 'S' mode, which limits you to apps installed from the Microsoft Store.
- ▶ If this is the case, you have two options:
 - ▶ You can follow the instructions at <https://support.microsoft.com/en-us/windows/windows-10-and-windows-11-in-s-mode-faq-851057d6-1ee9-b9e5-c30b-93baebeeabc85> to switch out of S mode (once you do so, you can't switch back, but in my opinion, that should not be an issue)
 - ▶ OR you may request a loaner laptop from Tech Services at <https://minneapolis.edu/technology-support-portal> (look for "Event Support/Checkout Equipment")

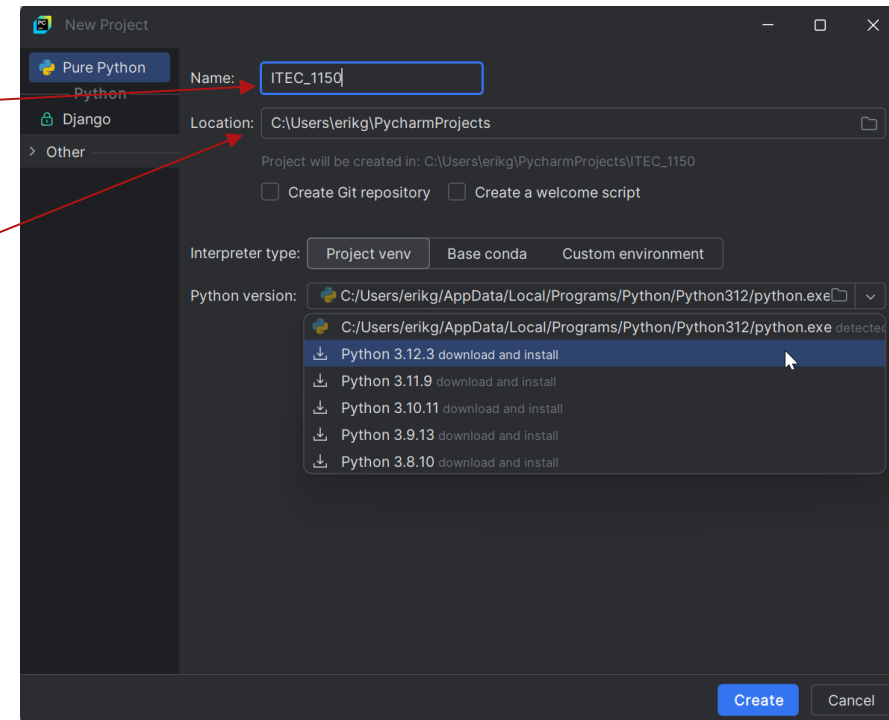
PyCharm – First Run

- ▶ Install PyCharm as any other application (you can leave all options as default).
- ▶ Once the install is complete, go to the Start menu (or whatever launcher your OS uses) and start PyCharm.
- ▶ You should see a window like the one shown on the right.
- ▶ Click "New Project"



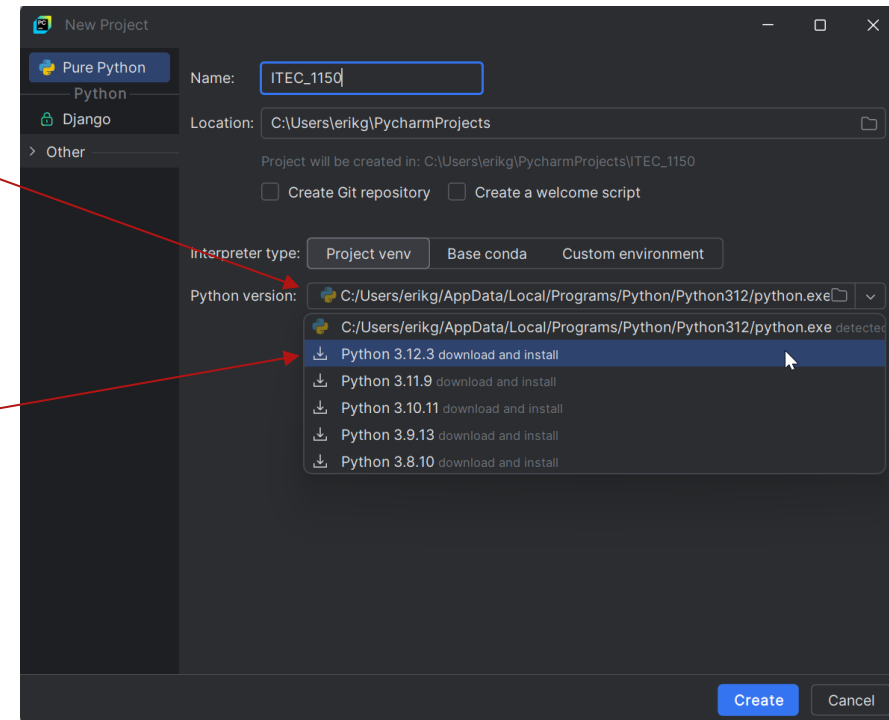
PyCharm – Project Setup

- ▶ In the **Name** box, give your project a descriptive name (I recommend "ITEC_1150", but choose whatever you like)
- ▶ In the **Location** box, choose where your project will be saved (the default location is fine)



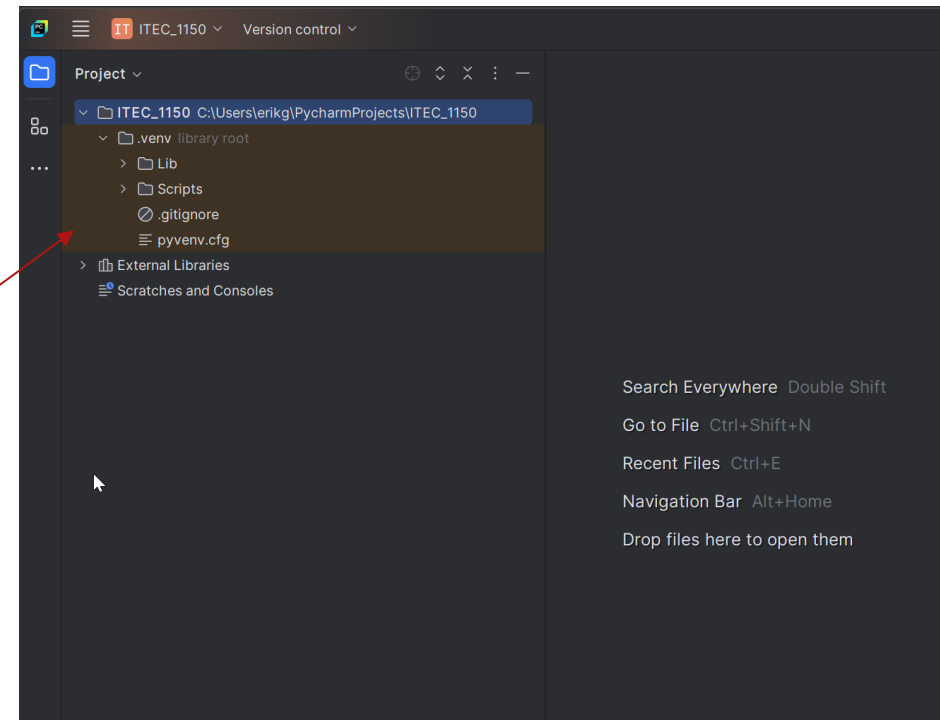
PyCharm – Project Setup (cont.)

- ▶ In the Python version drop-down, you may see something like my screenshot, which shows a Python version already installed.
- ▶ If the version is at least 3.9, you can select that.
- ▶ If there is no Python installed or a version less than 3.9 is installed, select the latest version with "download and install" next to it (3.12.3 in this case).
- ▶ Click Create



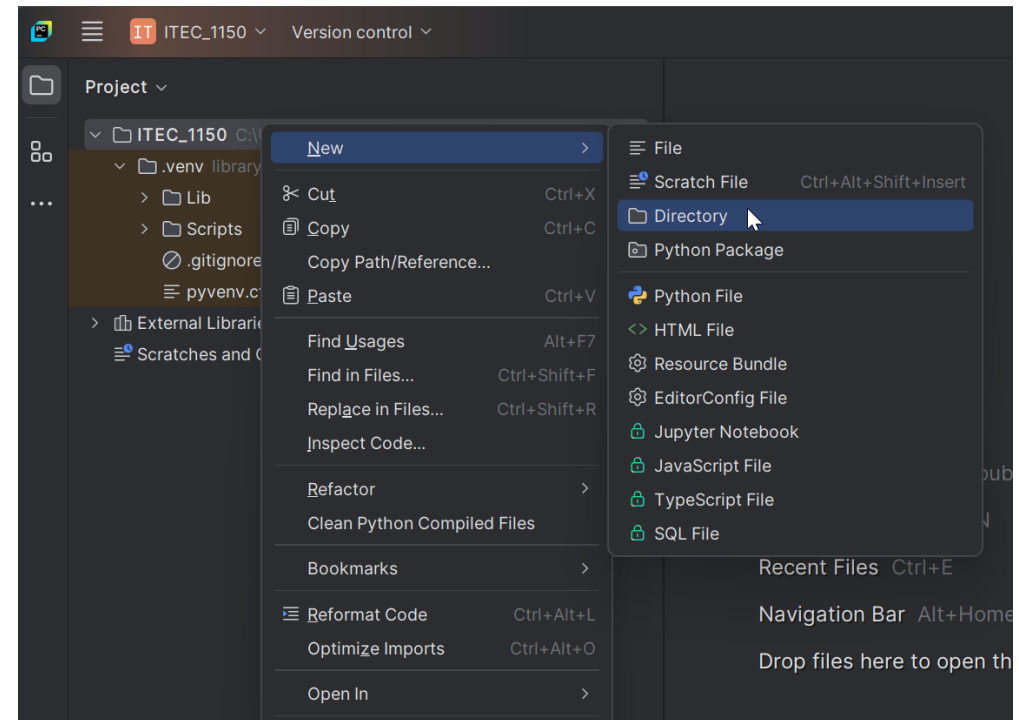
PyCharm – New Project!

- ▶ The PyCharm window will now open, with a lot of toolbars, some stuff on the left, and not much else, because we haven't added any project files yet.
- ▶ The left side of the window shows the Project Explorer. The brownish tint on files indicates they are controlled by PyCharm—you can change them but shouldn't. (The ones shown here control how Python is set up for this particular project.)



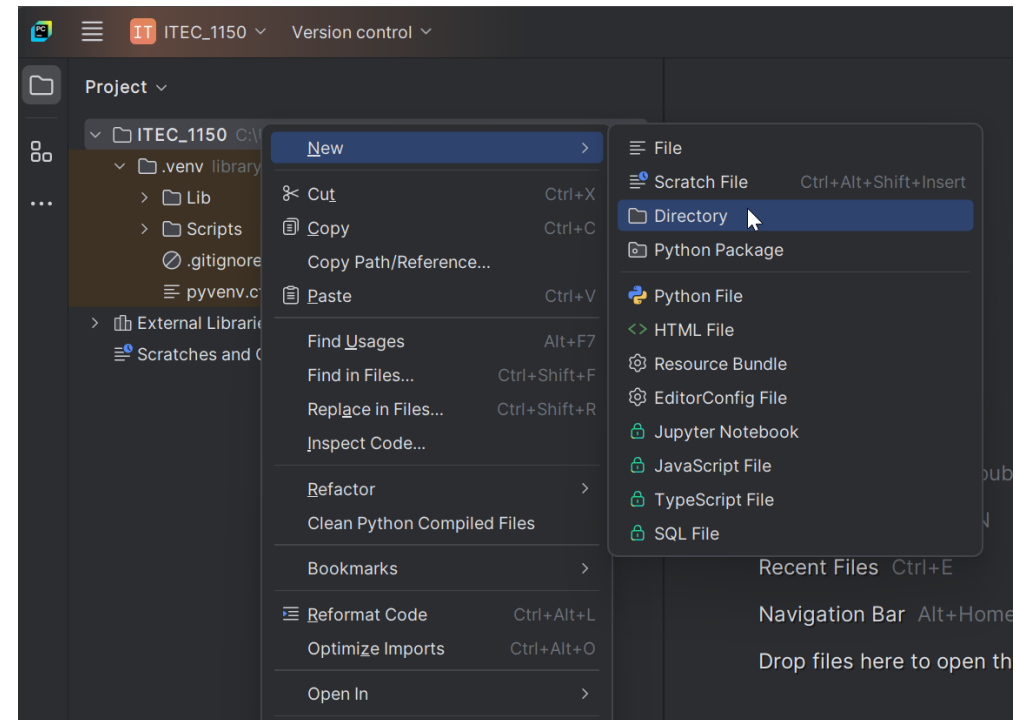
PyCharm – New Project!

- ▶ Right-click on your project (the gray ITEC_1150 in my example) and choose New → Directory
 - ▶ ("Directory" is programmer-speak for "folder")
- ▶ Every week, we'll add a new directory for that week's lab.
- ▶ Name your new directory "Week_01"



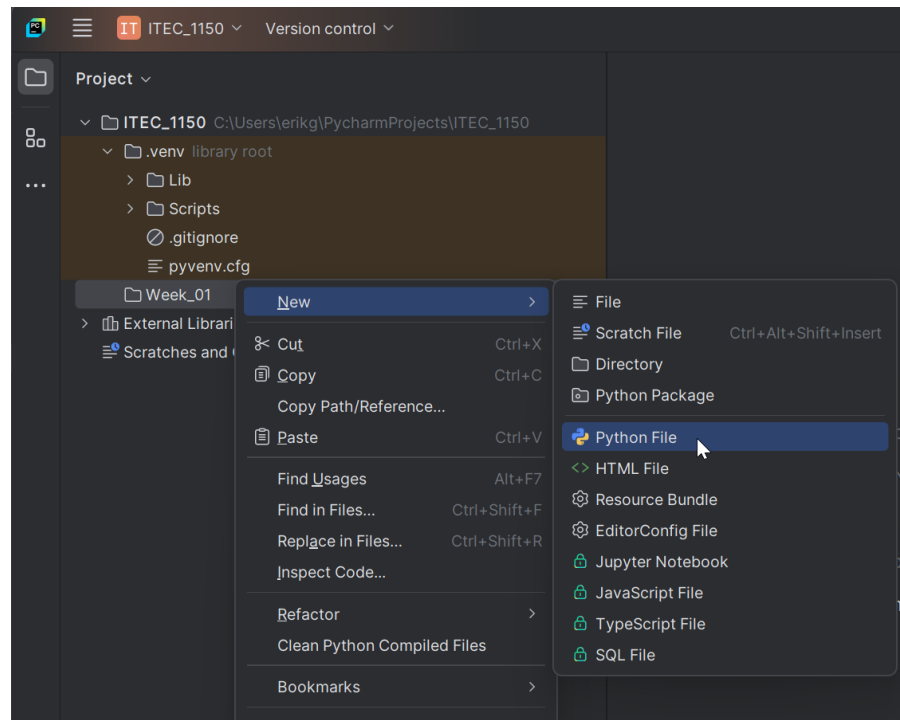
About File Names

- ▶ You may be wondering why I use the underscore "_" character instead of spaces and why I used "01" instead of just "1".
- ▶ A lot of programming languages will break text with spaces into separate pieces of text, which can create problems. Programmers therefore avoid using spaces in names wherever possible.
- ▶ The "01" is so the folders stay sorted when we get to Week_10 and above—without the zero before the 1, Week_10 would show up before Week_2!
- ▶ These are just programmer habits; you won't be graded on them, but it's a good practice to start.

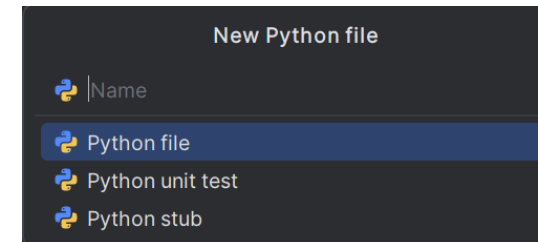


Your First Python File!

- ▶ Right-click on your Week_01 directory, and choose New → Python File

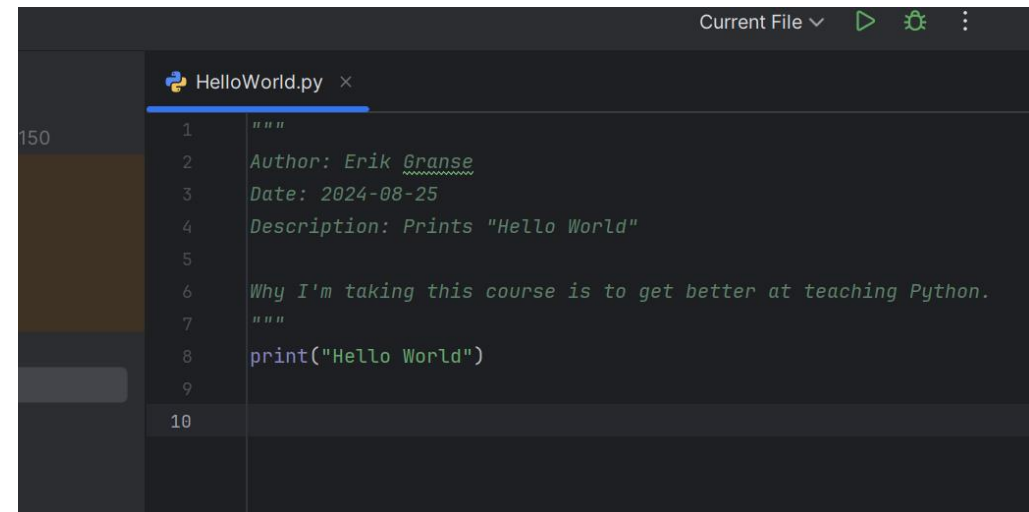


- ▶ Give the file a name (I chose "HelloWorld") and press enter.



Adding Code

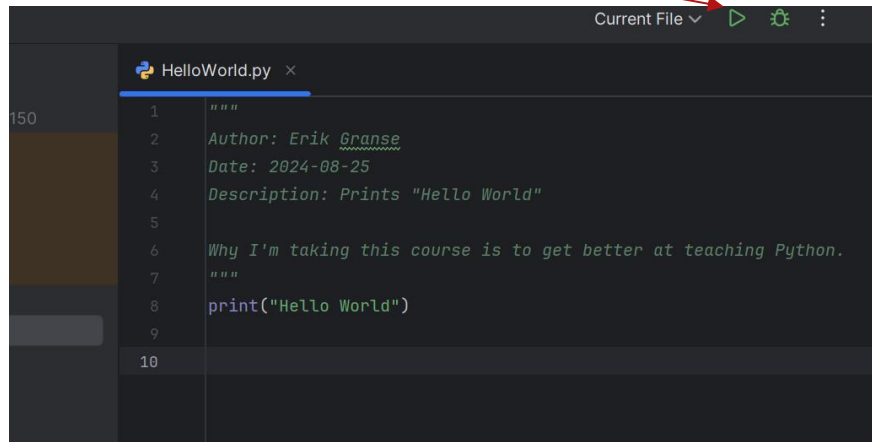
- ▶ In your new Python file, start by typing three double-quotes (PyCharm will automatically add three more because it knows you will need them).
- ▶ Between the three sets of double-quotes, add the lines on the right (replacing it with your own information, naturally).
- ▶ Below the double-quotes, add the print line as shown.



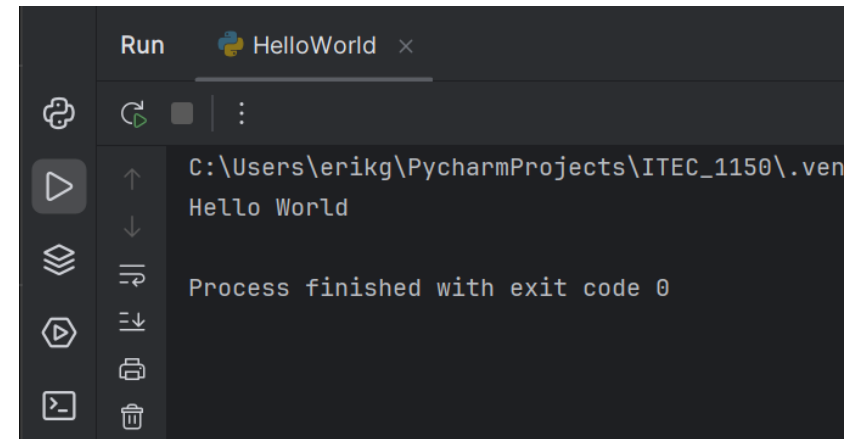
```
1 """  
2 Author: Erik Granse  
3 Date: 2024-08-25  
4 Description: Prints "Hello World"  
5  
6 Why I'm taking this course is to get better at teaching Python.  
7 """  
8 print("Hello World")  
9  
10
```

Running Your First Program

- ▶ Click the green triangle on the top-right area of the toolbar to run your program:



- ▶ A new area will open at the bottom of the PyCharm window which shows the output of your program:



Upload to D2L

- ▶ Upload your first program to the First Day of Class assignment in D2L.
- ▶ You're done!
- ▶ Start reading Chapter 1 in the book for next week.