

Installation Instructions for Introduction to Python (Python, PyCharm and pygame)

Apple macOS / OS X

Fall 2017

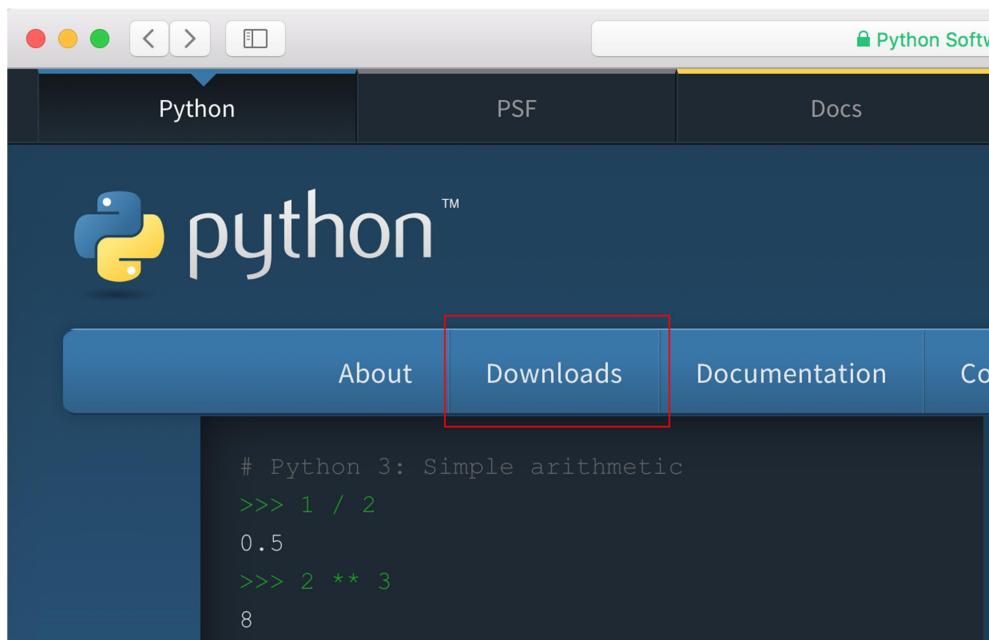
This document will cover the steps required to install the software used in XModus' Introduction to Python Programming class including installing Python 3.6, Jet Brain's PyCharm Community Edition editor and the Python gaming library pygame version 1.9.3.

Step 1 - Install Python 3:

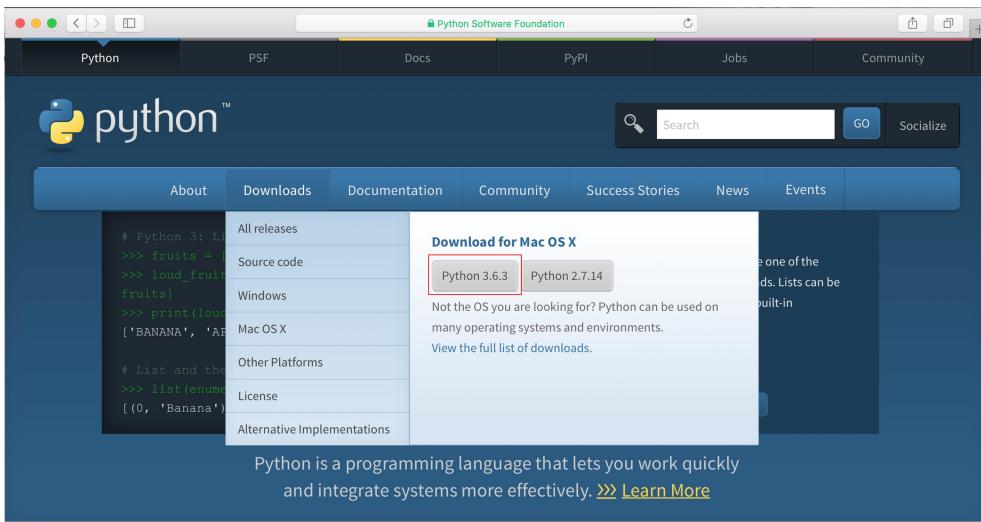
We must begin by first installing the Python 3 programming language onto your computer.

Go to <https://www.python.org> to download the Python 3 installation program.

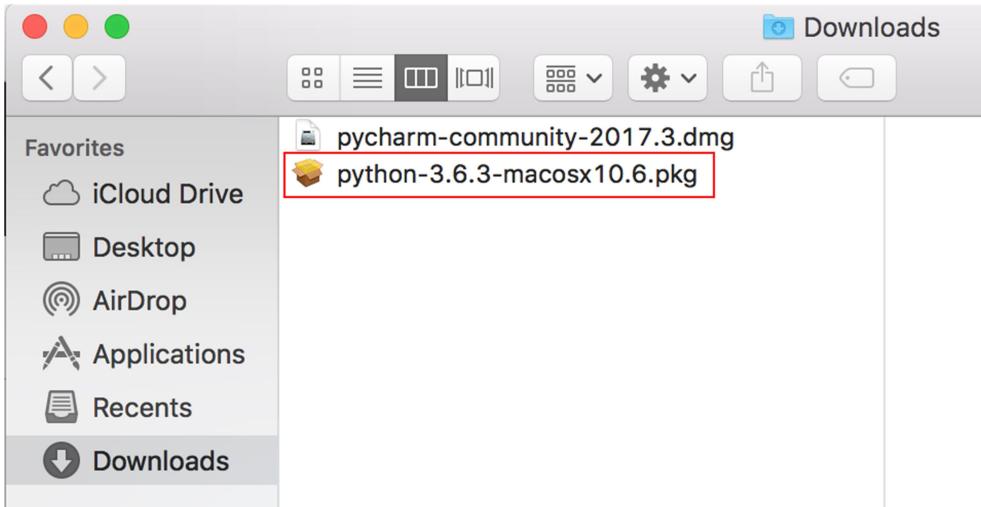
On the Python home page click the “Downloads” link at the top of the page (highlighted in red).



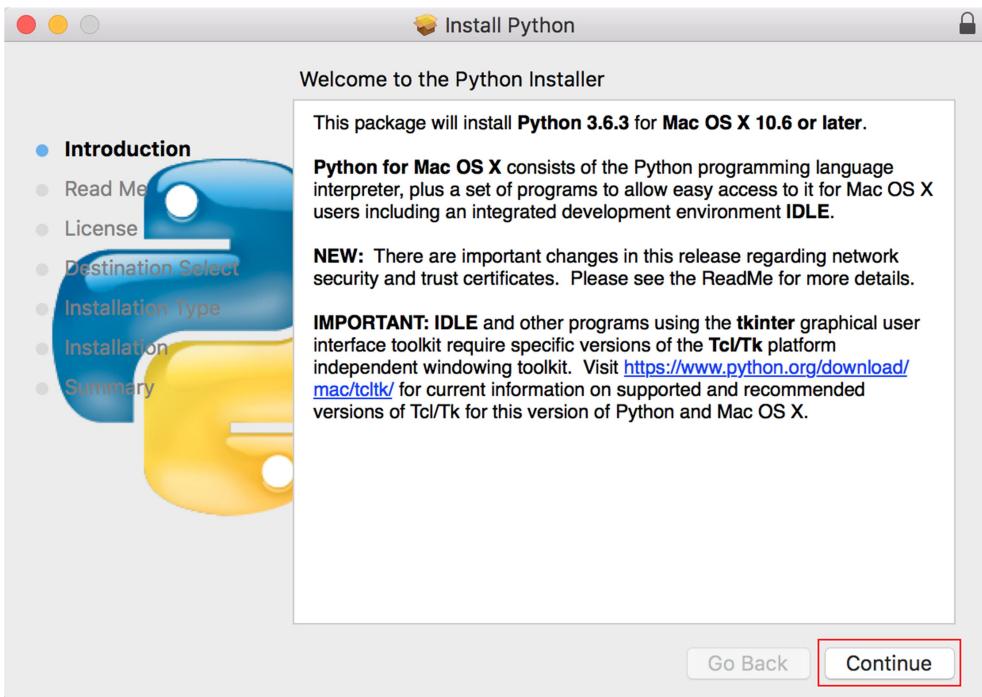
On the “Download the latest version for Mac OS X” page click the “Download Python 3.6.3” (note: if you visit this page in the future you will find a version higher than 3.6.3 – go ahead and download the higher 3.x.x version).



Once the download is complete visit your “Downloads” folder and find the “python-3.6.3-macosx10.6.pkg” file and double click on it to start the installation program.



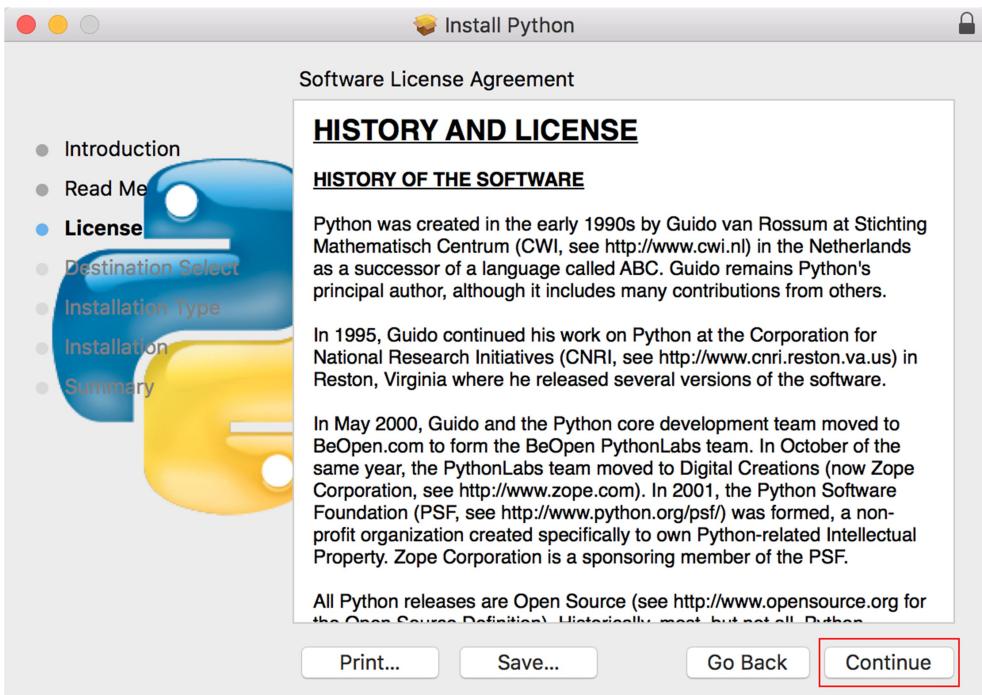
When the installer first appears click the Continue button in the bottom right corner.



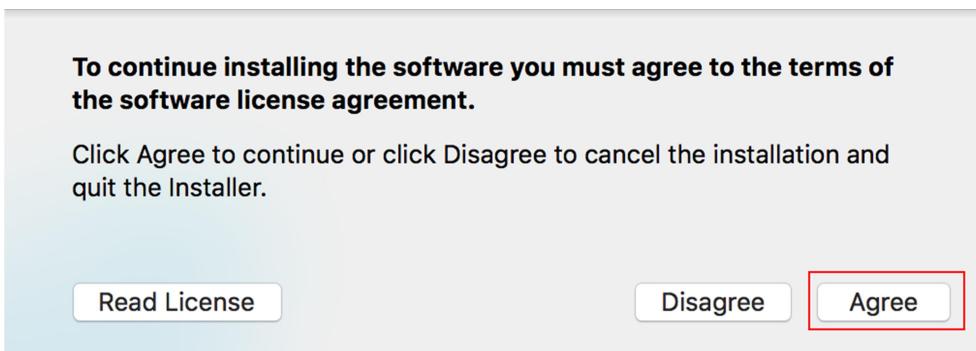
After reviewing the “Important Information” click the Continue button.



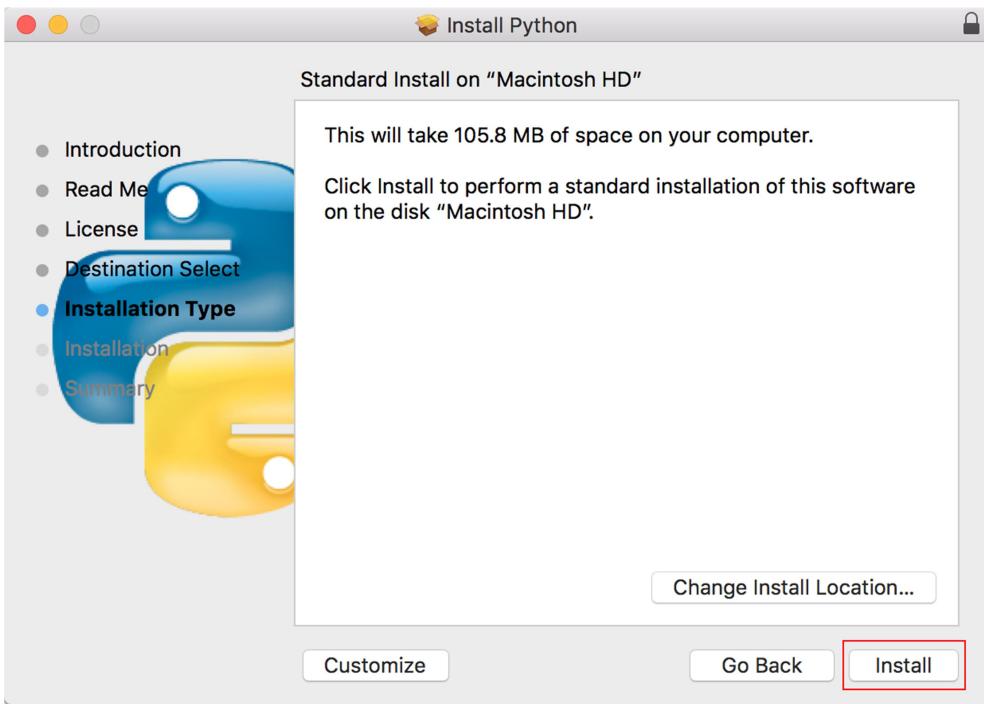
Click the Continue button after reviewing the Software License Agreement.



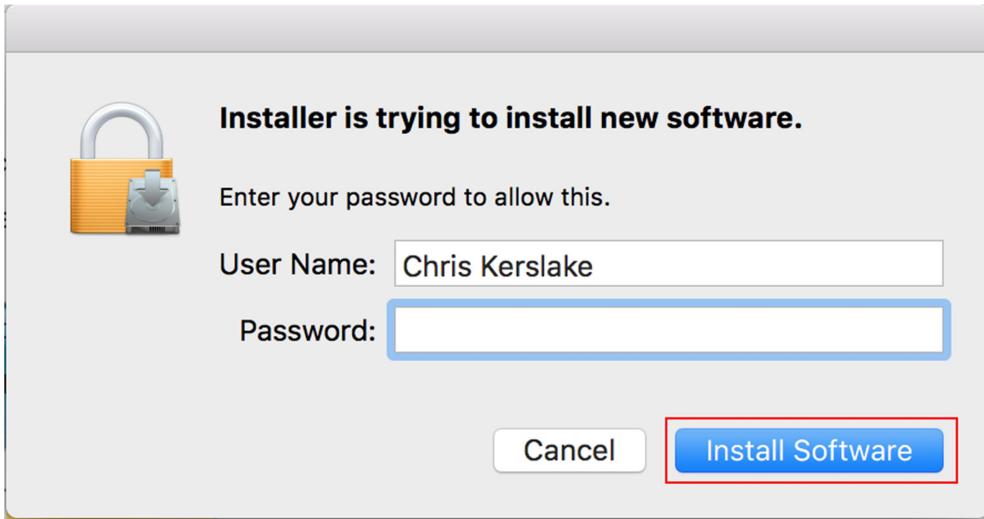
After clicking the Continue button on the Software License Agreement a dialog will appear asking you to click Agree to continue.



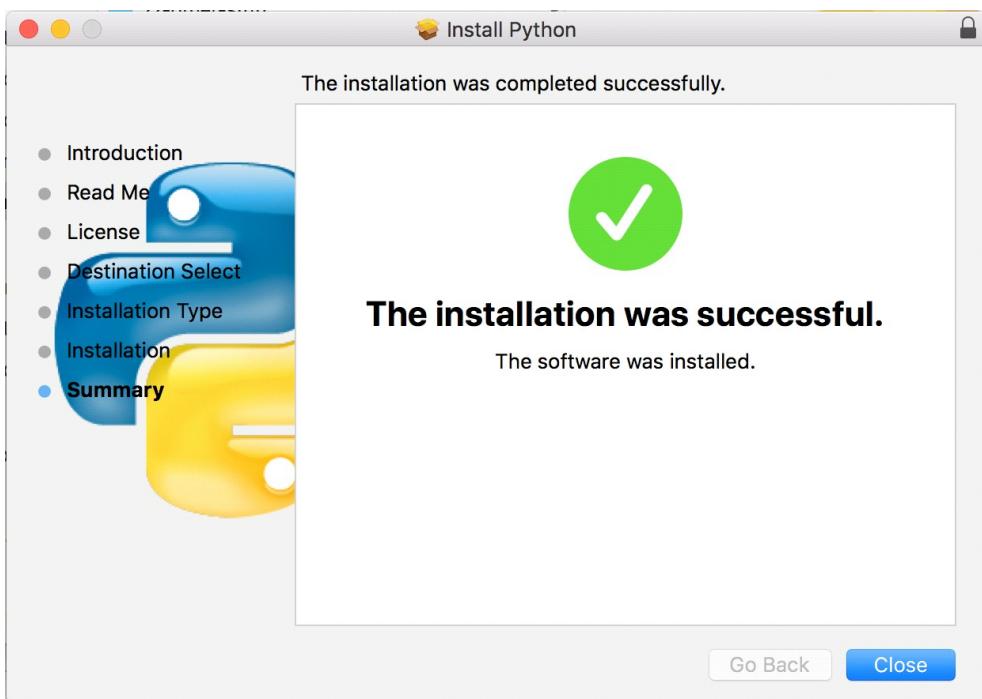
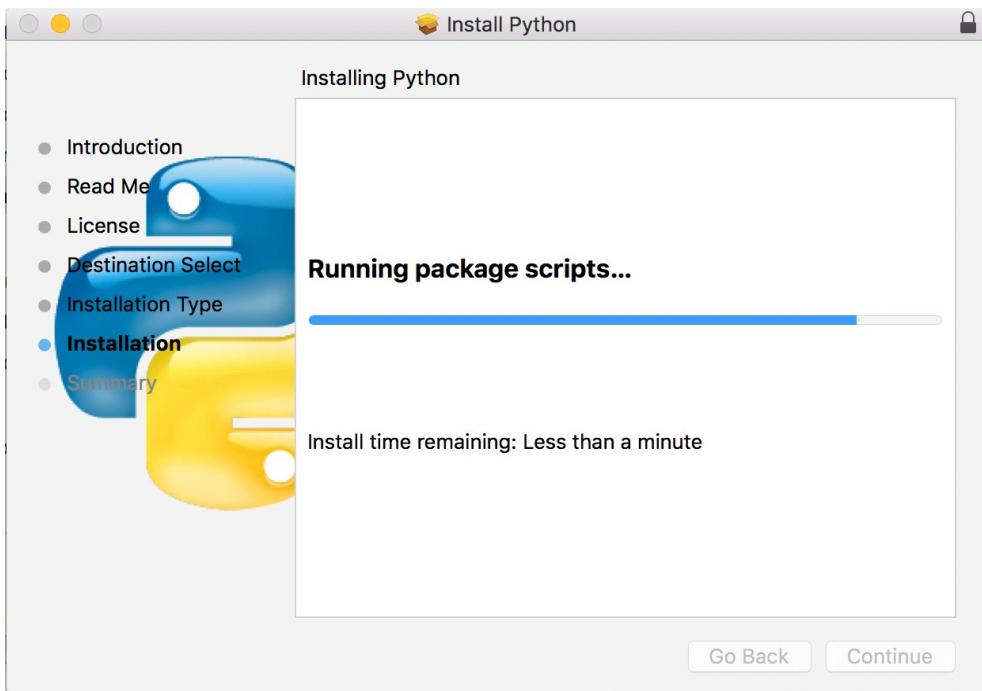
After clicking Agree the installer will ask where you want to install Python and I have left it with the default values – which may be differently named than yours. If you leave the installer to place Python in the default location, as I have, then you just need to click the “Install” button to start the installation.



Before the installer will start the actual installation it will first ask for your account password (or the password for the person who has permissions to install software onto the computer).



Once you enter the password and click the Install Software button the installer will start to install Python 3.x.



Once the installation is complete click the Close button to quit and the installer will ask if you want to keep the installer or not – it's up to you. Personally, I click Move to Trash.



**Do you want to move the "Python" Installer
to the Trash?**

To keep this package in its current location,
click Keep.

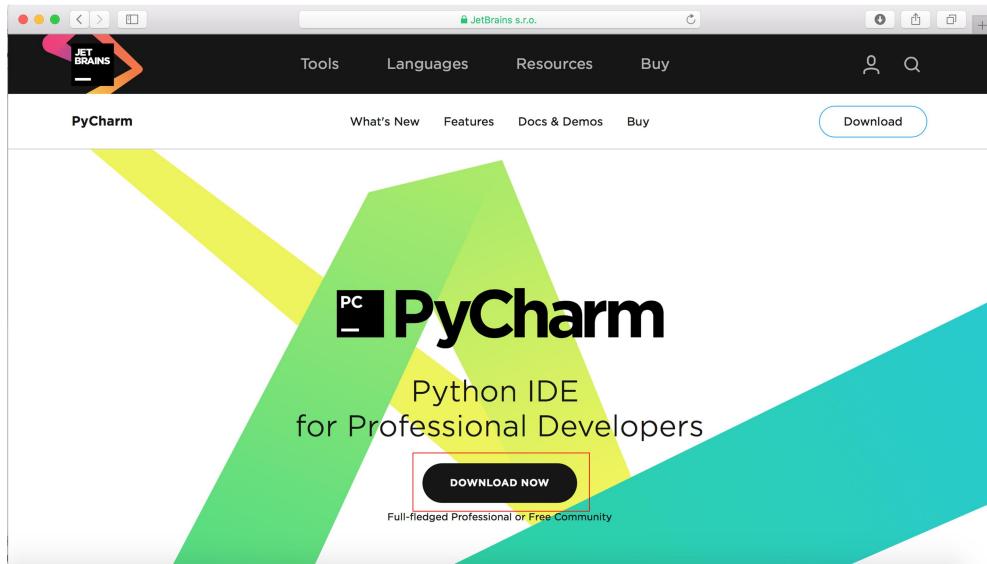
Keep

Move to Trash

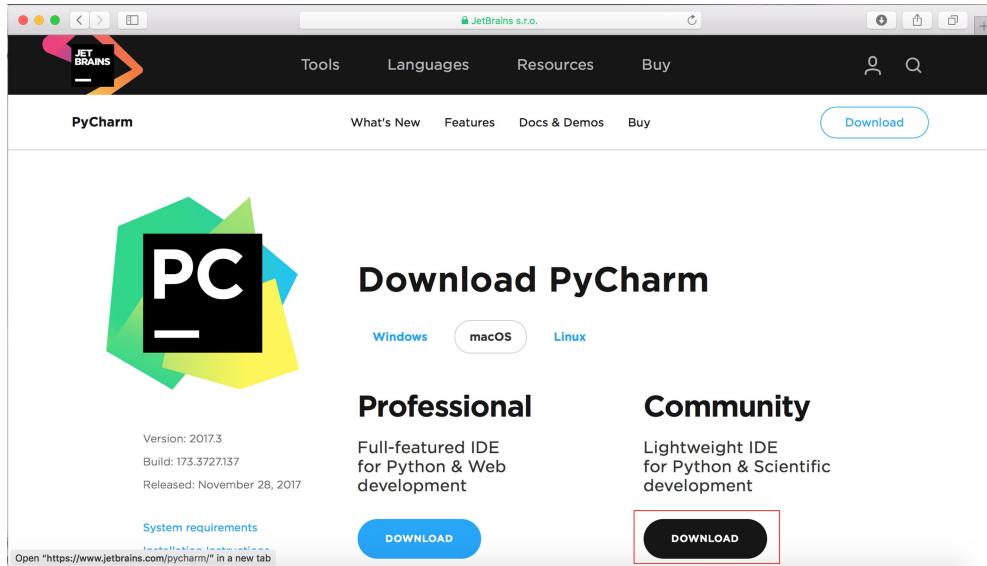
Step 2 Install JetBrains PyCharm Community Edition (CE)

Go to <https://www.jetbrains.com/pycharm/>

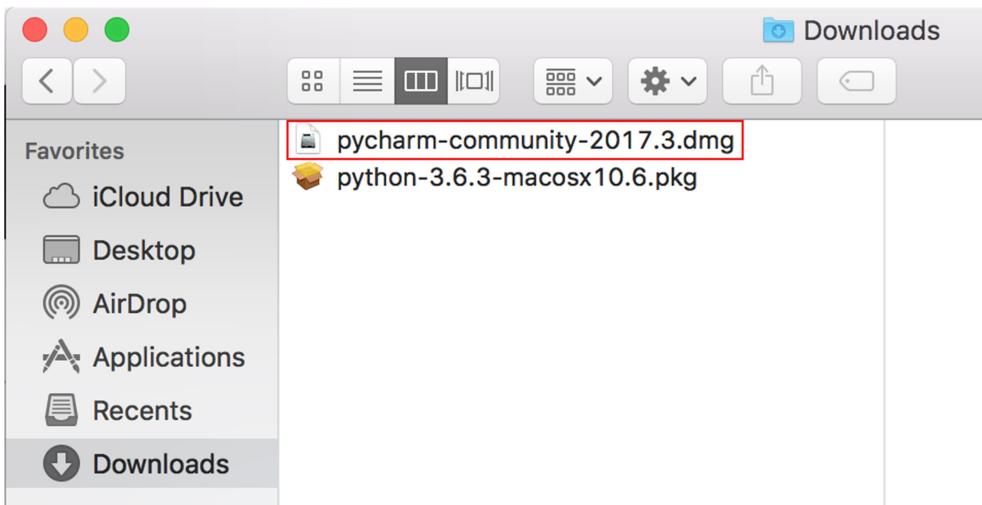
On the Jet Brain's PyCharm web page click the "DOWNLOAD NOW" button.



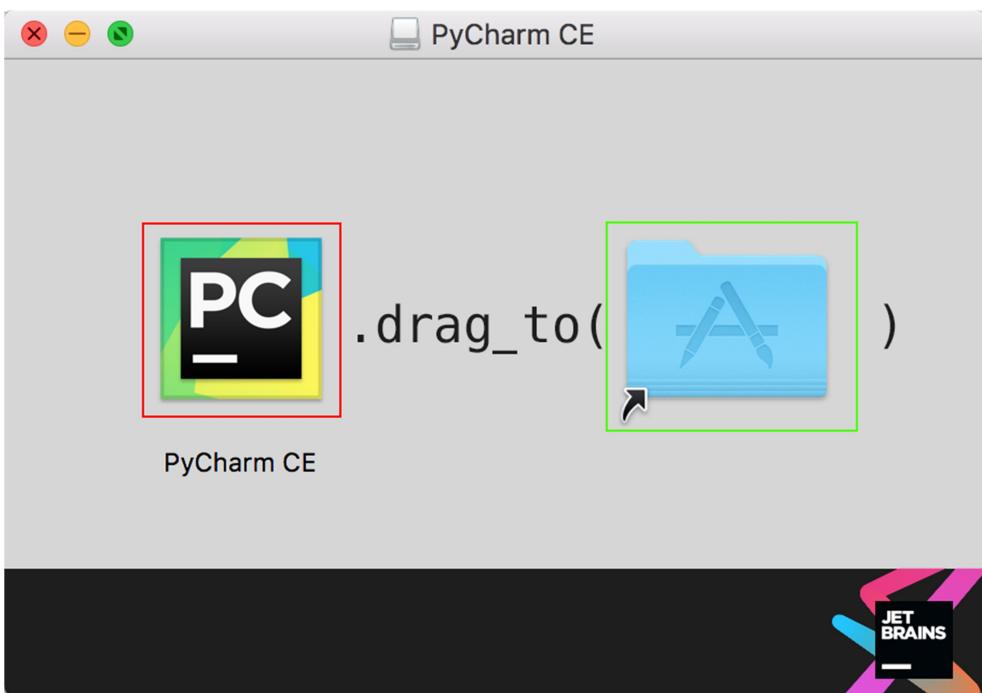
On the Download PyCharm page scroll down and click on the black DOWNLOAD button underneath the "Community" column (as shown below).



Once the download is complete visit your "Downloads" folder and find the "pycharm-community-2017.3.dmg" file and double click on it to start the installation program. Note that the version that downloads will be different than 2017.3 as the newest version changes so find the version that you downloaded and double-click it to launch the installer.



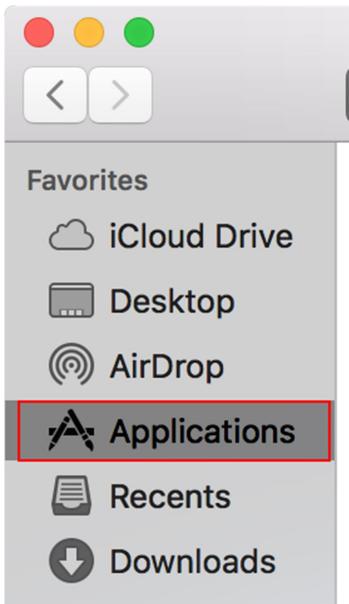
After double-clicking the dmg file the PyCharm CE dialog shown below will appear. Click and draw the “PyCharm CE” icon (outlined in red below) to the right and drop it into the Applications folder (outlined in green below).



After you have dragged PyCharm CE into the Applications folder you can open your Applications folder by clicking on Finder (see below), then click on “Applications” on the left area of Finder.

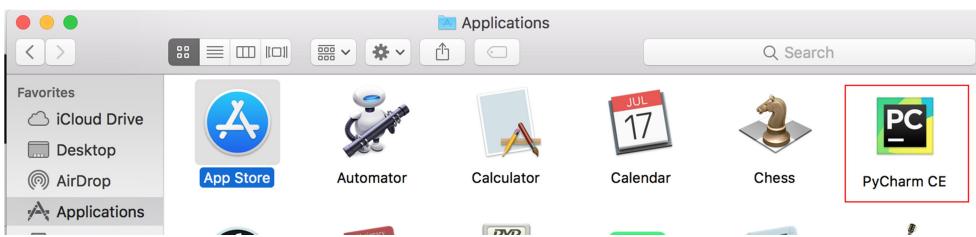


Finder icon

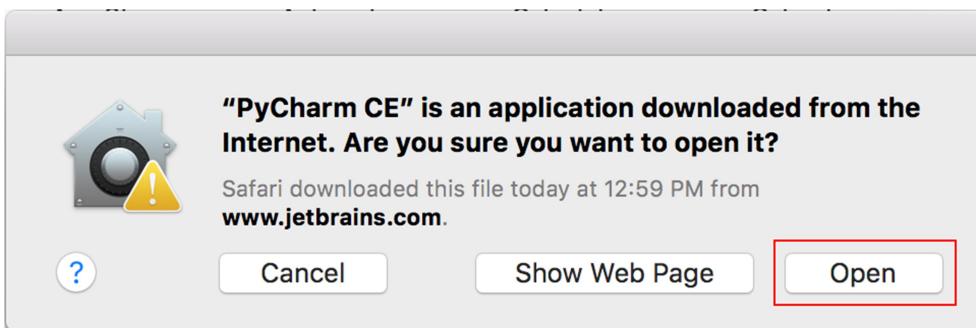


Applications folder in Finder

Once you are in Applications locate the “PyCharm CE” icon (outlined in red below) and double-click on it to launch it.



The first time the application is launched it will ask you if you are certain you want to open it. Click the Open button to start PyCharm.

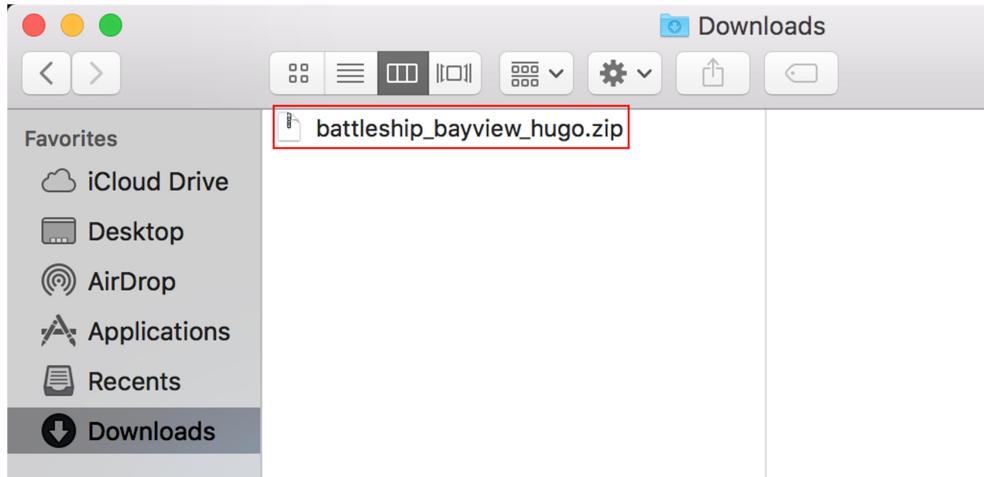


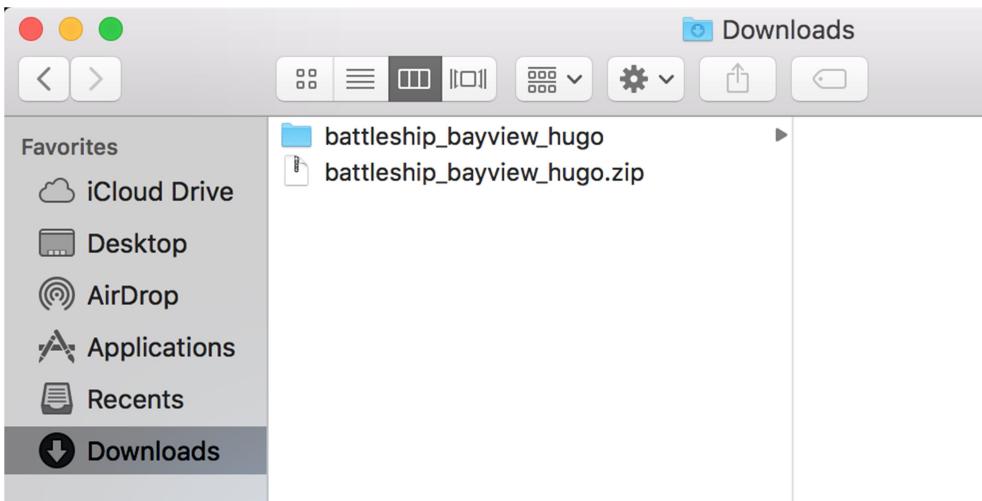


Step 3 Download your Python project from XModus.com

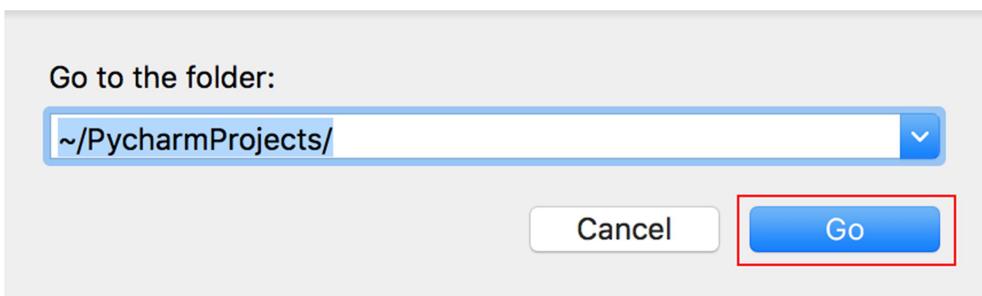
Once you have Python and PyCharm installed you can download your Python project from my class. For Battleship (Fall 2017) go to www.xmodus.com/programs-python-fall-2017.html and locate your project file. Each project is named something like “battleship_bayview_hugo.zip” – replace “bayview” with your school name and “hugo” with your own name, unless you are Hugo from Bayview.

After you download your project open Finder and go to the Downloads folder and locate your new zip file. Double-click your zip file to unzip it into the Downloads folder.

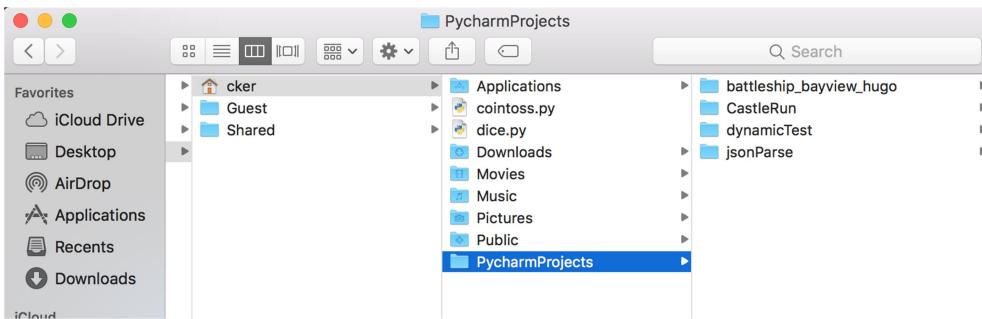




Once your project is unzipped select and copy it by selecting it in the Downloads folder by clicking on it once and then pressing **⌘+C** (Command+C) to copy. After you copy it press Command+G in Finder to get the “Go to the folder:” dialog shown below and input “~/PycharmProjects/” as shown below.



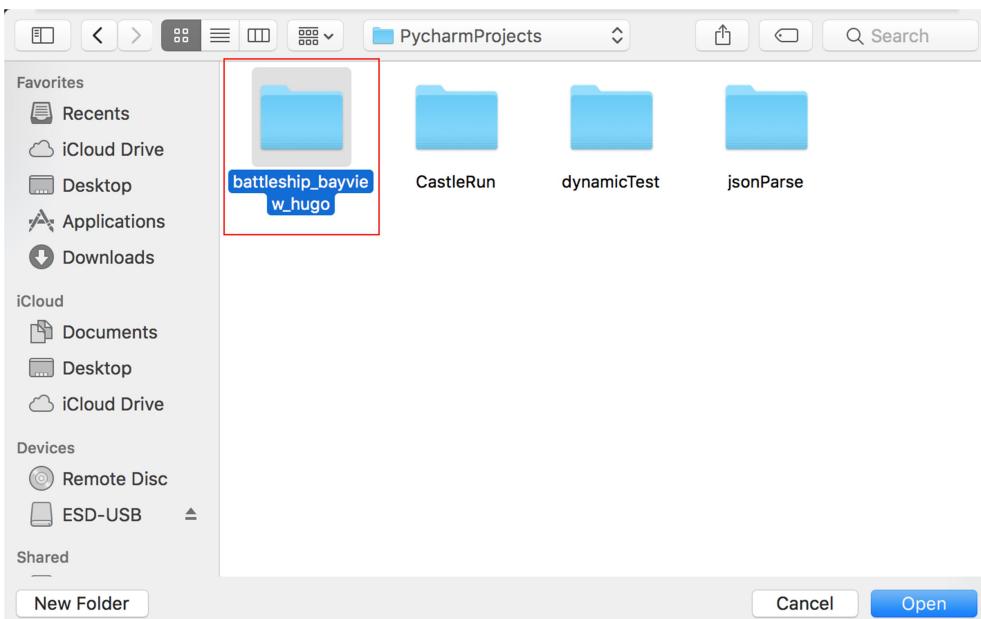
When you click the Go button Finder will jump to your PyCharm projects folder where you can paste in your project (that you copied in the previous step) and shown below



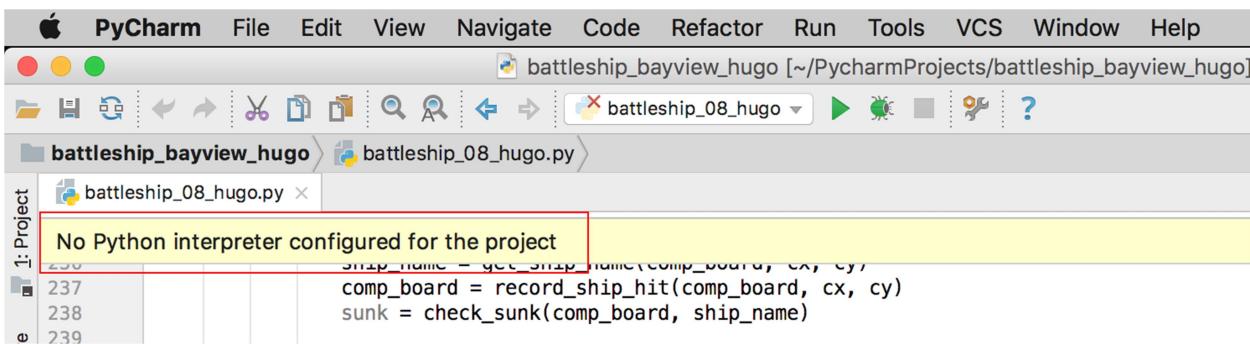
Once you have your project copied to your PycharmsProjects folder (as shown above) return to PyCharm so we can open the project the first time (after the first time your project will open each time automatically when you start PyCharm).



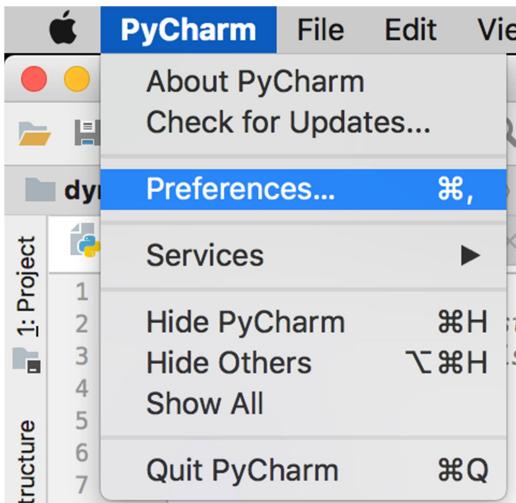
Navigate to your PyCharm projects folder, find your project folder (battleship_bayview_hugo in my example below), click on the folder and then click the Open button to open the project.



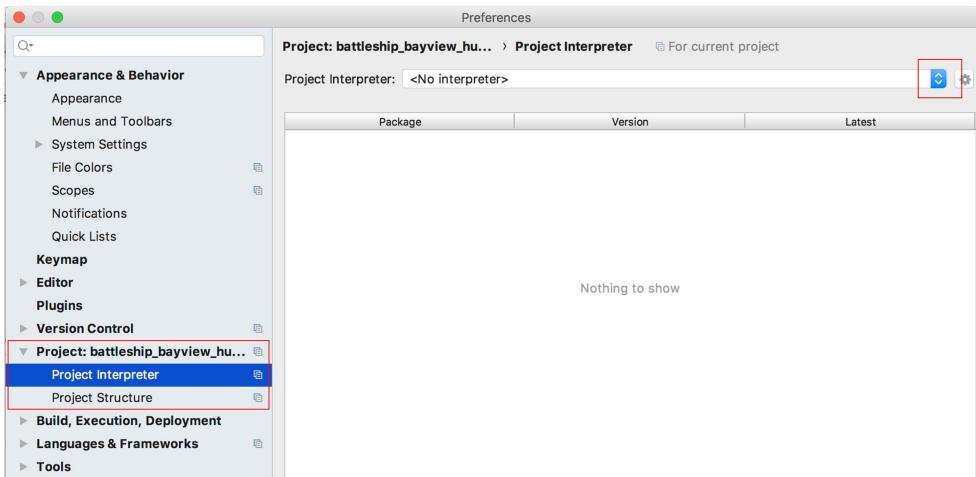
PyCharm will open your project and then after a few seconds (or more depending on how quick or slow your Mac is) you will see a yellow notice from PyCharm telling you, “No Python interpreter configured for the project”. You just need to tell the project where to find Python on your Mac.



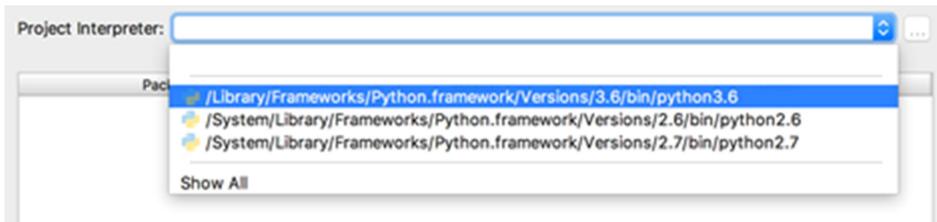
To locate and fix the missing Python interpreter click on the PyCharm main menu option in the top left corner of your screen (as shown below) and choose “Preferences” from the menu.



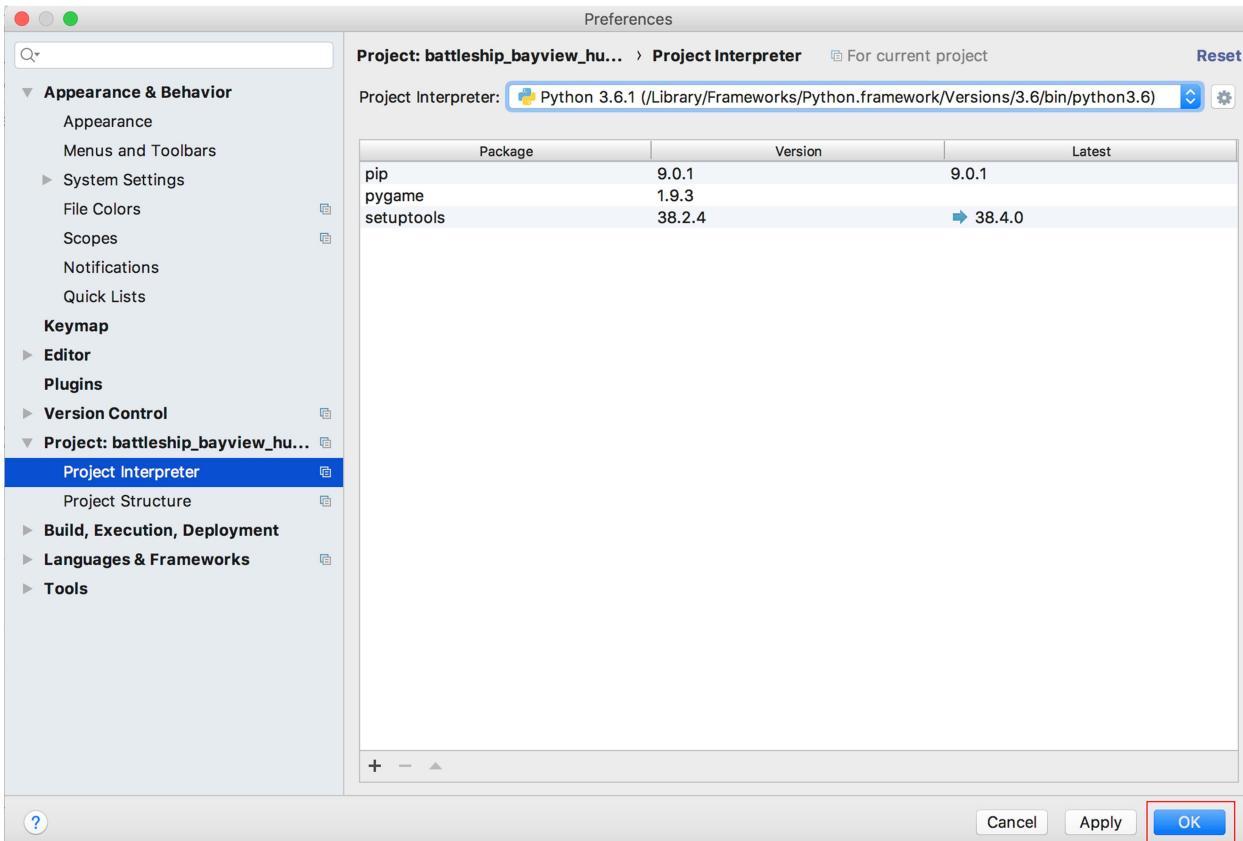
When the Preferences window appears locate the “Project: battleship...” on the left side. Click on this to expand it downwards and then click on “Project Interpreter” as shown below.



On the right side of the Preferences window click on the double arrows pointing up and down to drop down the list of available Python interpreters, as shown below and choose Python 3.6.



After you select the Python 3.6 interpreter you should see three packages and most importantly you should see “pygame” version 1.9.3 in the list. Click the OK button to close the Preferences window.



Finally, let's verify that everything is configured and our project is working by either clicking the green run arrow or clicking on the Run menu item and choose “Run ‘battleship_...’” are the top of the list.