Pointers for Getting Your Environment Setup

Learning more about operating systems

We’ve talked briefly about what an operating system is and what we'll need to know about operating systems for this course. If you want to learn some additional operating system concepts, check out the videos on this subject in the [Technical Support Fundamentals course](https://www.coursera.org/lecture/technical-support-fundamentals/module-introduction-I3n9l). If you want to dive deeper onto how to manage Windows and Linux, check out the [Operating Systems and You: Becoming a Power User](https://www.coursera.org/learn/os-power-user) course.

If you want to discover more about the history of Unix, you can read all the details on the Unix [Wikipedia page](https://en.wikipedia.org/wiki/History_of_Unix).

Installing Python and additional modules

If you don't have Python installed yet, we recommend that you visit the [official Python website](http://www.python.org/) and download the installer that corresponds to your operating system.

There’s a bunch of guides out there for installing Python and they all follow a similar process to the one we described in the videos. This [guide from Real Python](https://realpython.com/installing-python/) includes instructions on how to install python on a range of different operating systems and distributions.

Once you have Python installed on your operating system, it's a good idea to familiarize yourself with pip and the associated tools. You can find more info about these [here](https://packaging.python.org/guides/installing-using-pip-and-virtual-environments/).

Using package management systems

Package management systems help you better manage the software installed on your machine. These management systems vary a lot from operating system to operating system. So, you need to pick the one that works for the OS you’re using. Check out these guides for help with this:

* [Installing Python 3 on Windows 10 with Chocolatey](https://www.digitalocean.com/community/tutorials/how-to-install-python-3-and-set-up-a-local-programming-environment-on-windows-10)
* [Installing Python 3 on MacOS with Homebrew](http://www.pyladies.com/blog/Get-Your-Mac-Ready-for-Python-Programming/)
* [Package management basics on Linux](https://www.digitalocean.com/community/tutorials/package-management-basics-apt-yum-dnf-pkg)

Other information

* [Python in the Microsoft Store for Windows 10](https://devblogs.microsoft.com/python/python-in-the-windows-10-may-2019-update/)

..

Setting up Your Environment

After you’ve installed Python and checked that it works, the next step to set up your developer environment is to choose your main code editor.

These are some of the common editors for Python, available for all platforms:

* [Atom](https://atom.io/)
* [Eclipse](http://www.eclipse.org/)
* [PyCharm](https://www.jetbrains.com/pycharm/)
* [Sublime Text](http://www.sublimetext.com/)
* [Visual Studio Code](https://code.visualstudio.com/)

You can read more about these editors, and others, in these overview comparatives:

* [Python IDEs and Code Editors (Guide)](https://realpython.com/python-ides-code-editors-guide/#pycharm)
* [Best Python IDEs and Code Editors](https://www.softwaretestinghelp.com/python-ide-code-editors/)
* [Top 5 Python IDEs for Data Science](https://www.datacamp.com/community/tutorials/data-science-python-ide)

We encourage you to try out these editors and pick your favorite. Then, install it on your computer and experiment with writing and executing Python scripts locally.

Is it worth the time?

Check out the following link for more information:

* <https://xkcd.com/1205/>

How to Log in to Qwiklabs

In the following assessments, you’ll be using Qwiklabs for hands-on learning. Qwiklabs provisions resources backed by Google Cloud that will be used to perform the tasks in the assessments. By using Qwiklabs, you won't have to purchase or install software yourself, and you can use the Linux operating system as if it was installed on your local machine.

**Important details:**

* You will have 90 minutes to complete each lab.
* You'll experience a delay as the labs load, as well as for the working instances of Linux VMs. So, please wait a couple of minutes.
* Make sure to access labs directly through Coursera and not in the Qwiklabs catalog. If you access labs through the Qwiklabs catalog, you will not receive a grade. (As you know, a passing grade is required to complete the course.)
* You'll connect to a new VM for each lab with temporary credentials created for you; these will last only for the duration of the lab.
* The grade is calculated when the lab is complete, so be sure to hit "End Lab" when you're done. Note: after you end the lab, you won't be able to access your previous work.
* To get familiar with entering labs, find the links below for the **operating system of the machine you are currently using** for a visualization of the key steps. Note that while video resources linked below do not have a voiceover or any audio, all important details will still be housed in each lab’s set of instructions on the Qwiklabs platform.

**Demo videos for accessing labs:**

* [For Windows users](https://www.youtube.com/watch?v=Al1opDxb3ok)
* [For Mac users](https://www.youtube.com/watch?v=76VlwjMYIxg)
* [For Linux users](https://www.youtube.com/watch?v=YtrO8nW0ugM)
* [For Chrome OS users](https://youtu.be/HklttPmGGKc)