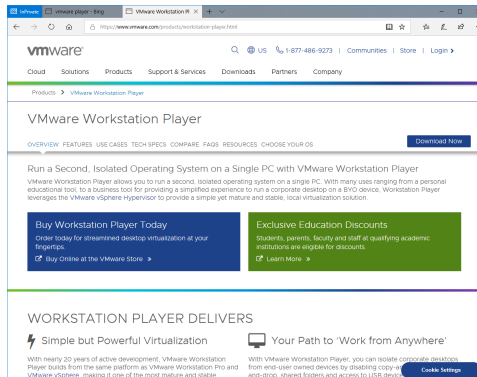# CS2040 – Installing the Linux VM

In this course, we will be developing code using a Linux (Ubuntu) Virtual machine. I *strongly* recommend that you download and install the same VM now. Code which behaves correctly in a different environment, but incorrectly on the VM will be considered incorrect.
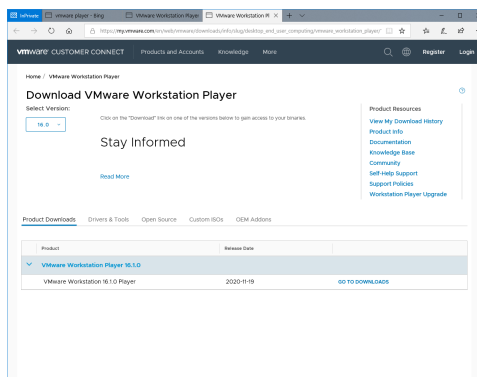
Here are the steps for installation:

1. Install VMware Workstation Player

   (a) Go to `https://www.vmware.com/products/workstation-player.html` in your browser (or search for VMware Player)
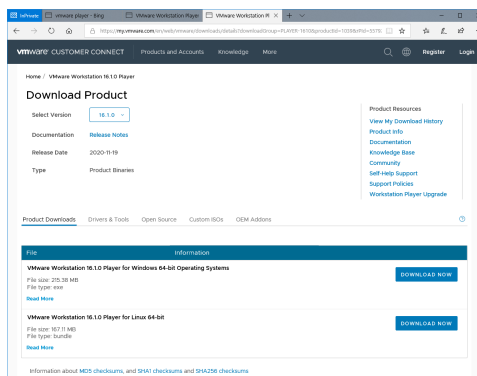

   Click the "Download" link

   (b) Then, for the current version, click the download link.

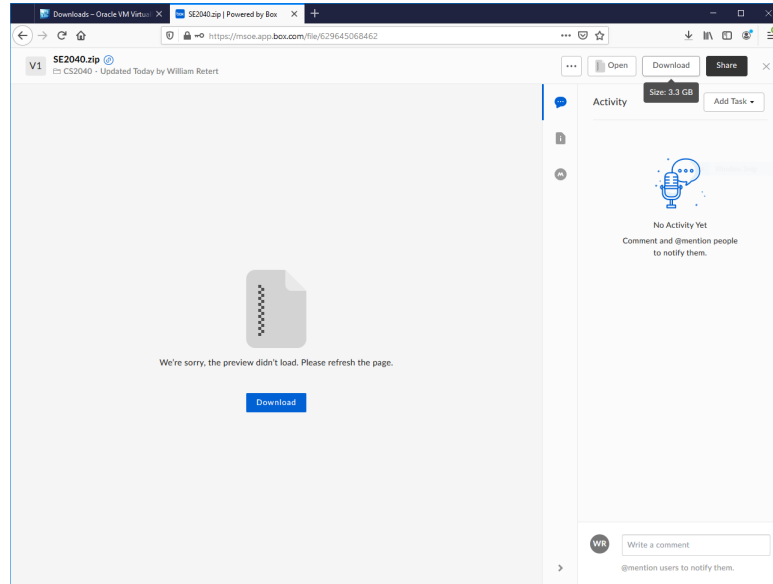   (c) Then, download the installer for Windows.

   This will download a file called "`VMware-player-16.1.0-17198959.exe`" (the exact numbers may vary depending on when new versions become available; download the latest version you can.

(d) Now open the directory containing the VMware player installer ("`VMware-player-16.1.0-17198959.exe`") and run it.[1] The default installation is OK.
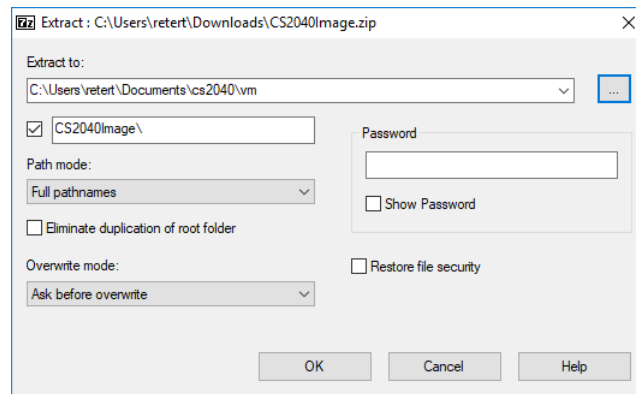
2. Download the VM

(a) Download the VM using the link on Canvas (`https://msoe.box.com/s/2enstogljtlu373qz24nt8ik20l0jf` don't forget to click "Download"
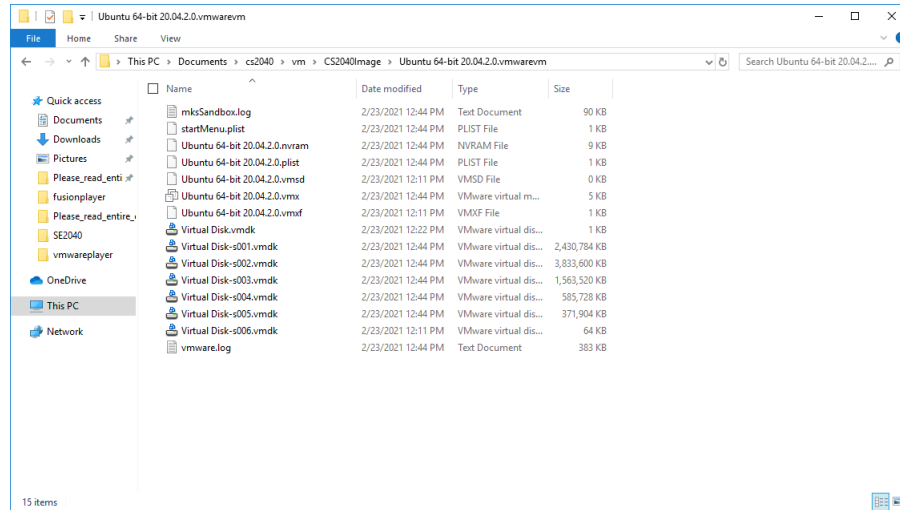

This may take a long time to download. Please allow time to complete the download *before lab*.

(b) Extract the zip file to a directory of your choice, by right-clicking on the zip and selecting "7-zip→Extract Files..." then choosing the directory to extract to. (I made a `cs2040\vm` subdirectory in `Documents`.)
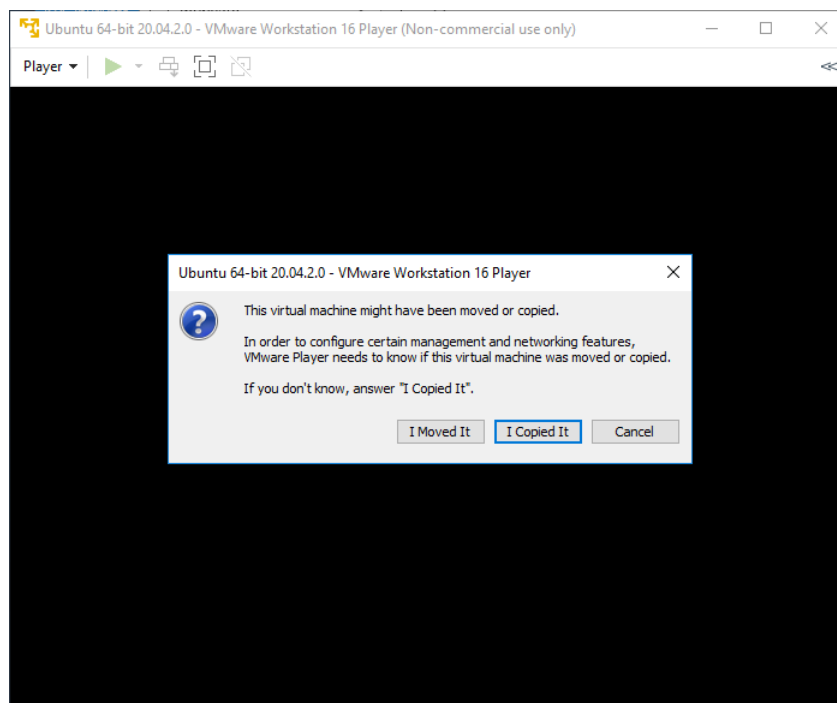

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[1] If your computer restarts to install the VC redistributable, you may need to re-run the installer after the reboot.

3. Navigate to the directory where you extracted the file(s). Inside the `CS2040Image` directory, go into the `Ubuntu 64-bit 20.04.2.0.vmwarevm` directory.
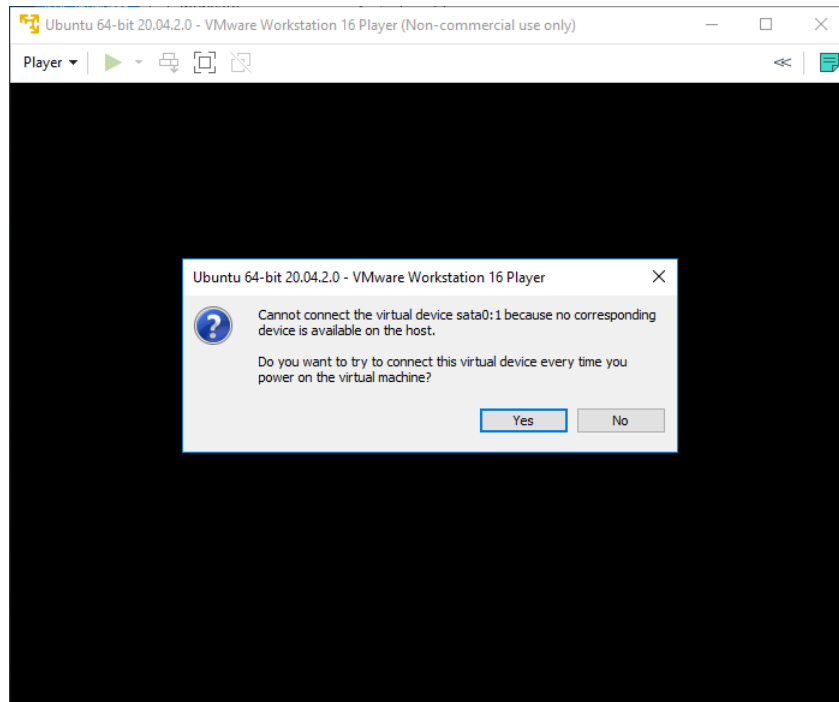

Inside that directory, double-click on `Ubuntu 64-bit 20.04.2.0.vmx` (the VMware virtual machine file) to launch your VM.
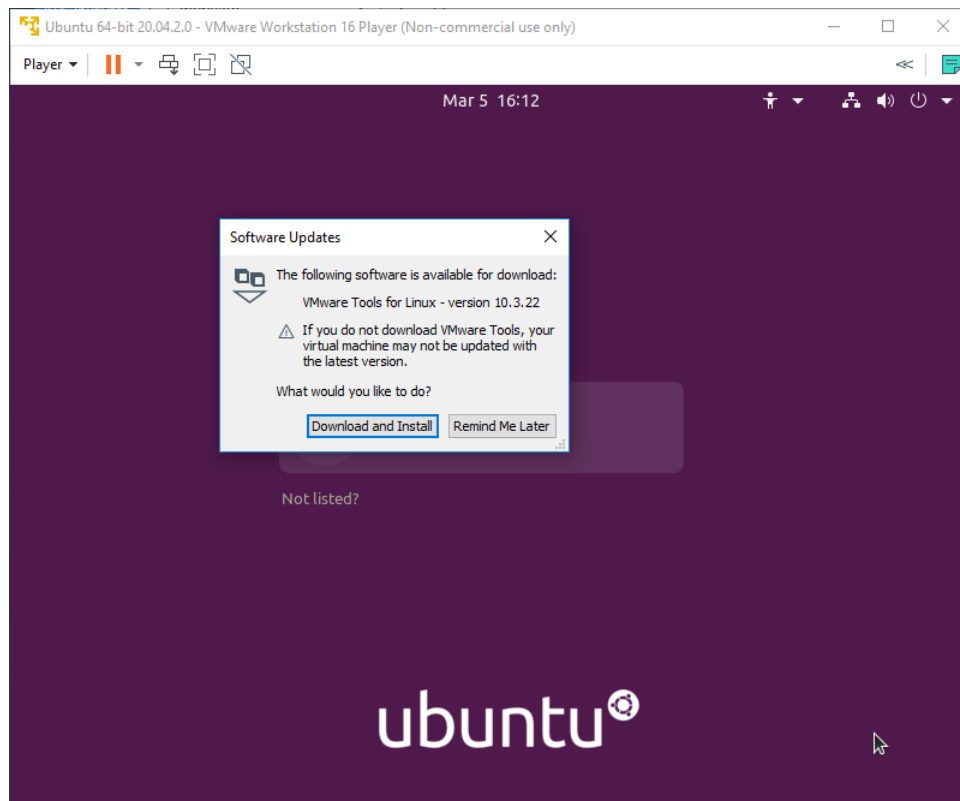
4. When you first run the VM, VMware Player will ask you if the machine has been moved or copied. Select "I Copied It."
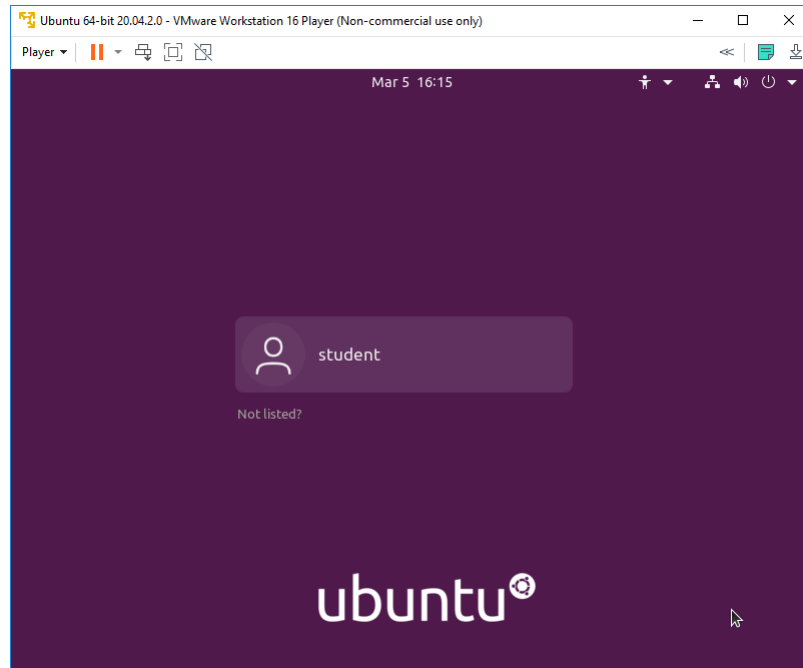
5. You will then receive warning(s) about devices that are missing from the initial configuration. Do not try to connect on future startups. (Otherwise this message will recur.)
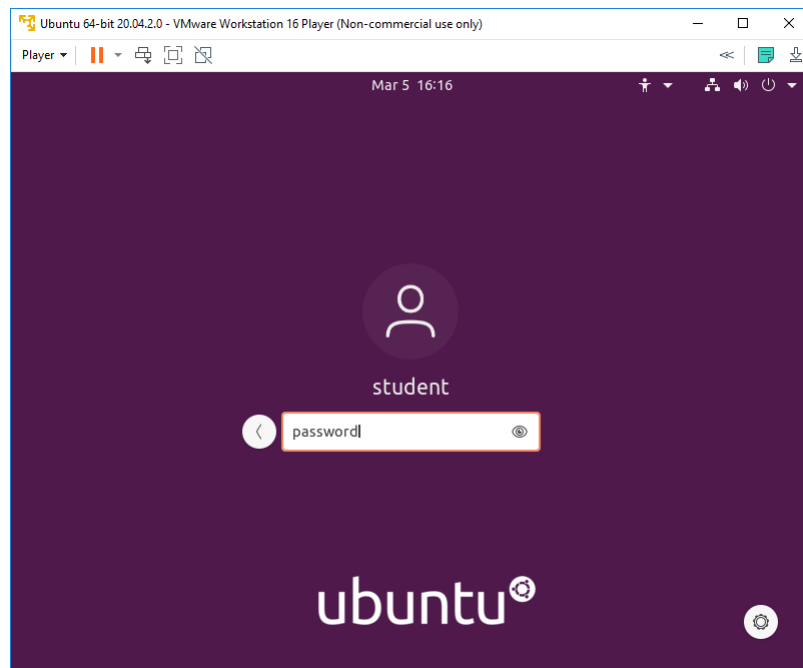

6. You will then be prompted to download/install updated VMware Linux Tools. Do so.
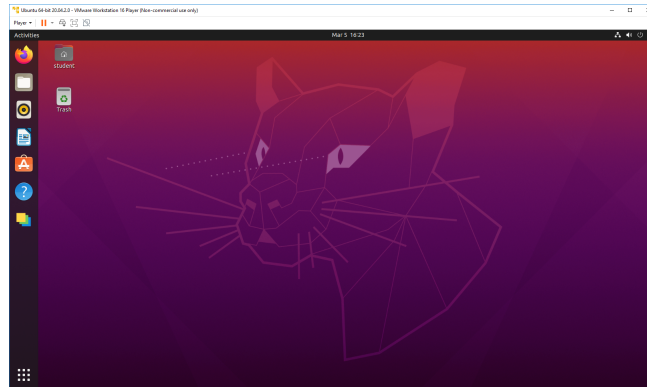
7. Your login name is "student". Double click it.

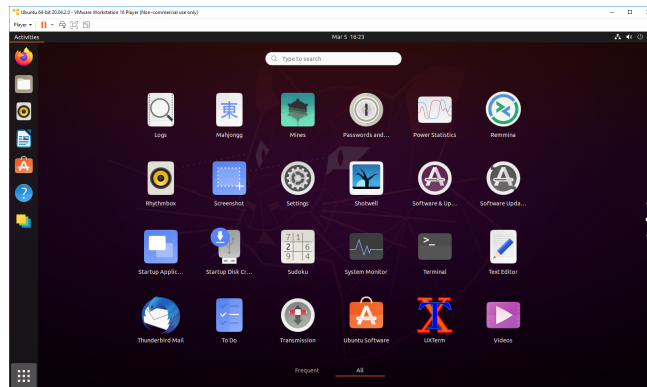

The password is "password".

Do not use these for non-virtual machines (or any machines you want to keep secure).
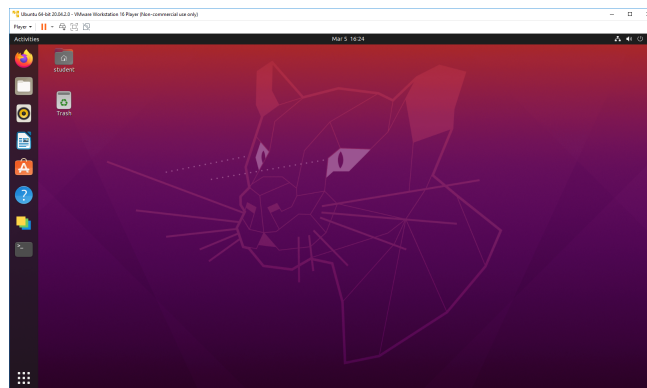
8. Once you have logged in, you will see a desktop. Some common applications are on the left. Notably, the left-top is firefox, and the bottom color icon is the CodeLite IDE, which we will be using for C/C++ development.

9. Clicking the nine dots in the far bottom left will list all applications. On the second page is the "Terminal" app, which you will use to run things on the command line.

If you right-click on it, you can add it to your favorites

After Terminal is a favorite:

10. Your virtual machine is now ready.