CMPS 3390 Lab 2

Fall 2024

Part 1 - Setup

1. For this assignment you will be learning the basics of Virtual Machines and how to set them up.
2. If you are using the lab computers, they already have VMWare Workstation installed on them.
   If you do not already have **VMWare Workstation** installed on your computer, you will need to download and install it first. If you go through their official channels you will get redirected to broadcom's website and asked to sign a lengthy form. **DO NOT DO THIS.**
3. If you want to install on your machine, I have found direct links to the VMWare Workstation download files:
   - For Windows: CLICK HERE
   - For Mac: CLICK HERE
   - For Linux: CLICK HERE

   You might notice that the file you download has a .tar file extension. This is a compressed file that you will need to extract. Depending on your version of windows you might be able to extract it by right clicking. Otherwise, you will need to use a utility like 7-zip. (You should be using 7-zip anyway because it's awesome.)
4. When you install VMWare Workstation 17 you do not need to provide a license. Just make sure you select that you are using it for "personal use".

Part 2 - Create Linux VM

Option 1

1. If you would like to install your own flavor of linux/windows on your VM that is great!
   I will briefly discuss how to download an ISO and use it to set up a new VM.
2. When setting up your VM make sure you create a virtual drive with sufficient space to install your dev tools.

Option 2

3. In the interest of time, I have already set up a VM with Pop!_OS pre-installed and configured that we can use for this lab: https://drive.google.com/file/d/11wvoHwuoSODT4G84CtQ1Ep1BvKPFTREC/view?usp=sharing
4. Run VMWare Workstation and go to File... Open.
5. Find the **.ova** file that you downloaded and open it. Complete the import wizard.
6. You will now see the new VM added to your Library.

Part 3 - Setting up Dev Environment

1. For this demo I will be using IntelliJ, which is made by JetBrains.
2. Lucky for us, JetBrains has their own app for installing/managing all of their product installs:
   https://www.jetbrains.com/toolbox-app/
3. Download the appropriate version for your platform.
   For linux, you will have to download the file, extract it, and run it from the terminal
4. Once Toolbox is installed, you can use it to install IntelliJ IDEA Community Edition.
5. I will give a short demo in class showing off many of the features of Intellij, and maybe we'll even build a very simple JAVA desktop app using the built-in GUI designer.

Useful Links

VMWare
https://www.vmware.com/products/desktop-hypervisor/workstation-and-fusion
https://softwareupdate.vmware.com/cds/vmw-desktop/

VirtualBox
https://www.oracle.com/virtualization/technologies/vm/downloads/virtualbox-downloads.html
https://download.virtualbox.org/virtualbox/

HYPER-V
https://learn.microsoft.com/en-us/virtualization/hyper-v-on-windows/about/

Windows Trial Version for Devs
https://developer.microsoft.com/en-us/windows/downloads/virtual-machines/

Pop!_OS
https://pop.system76.com/