1. Begin the download of the Ubuntu iso file. This could take over an hour.
2. Download VirtualBox and launch installer, accept all default preferences
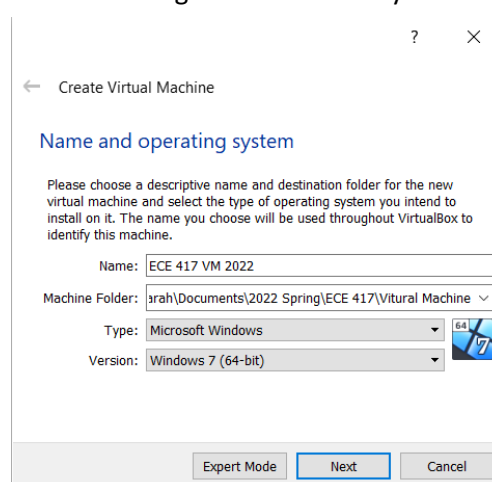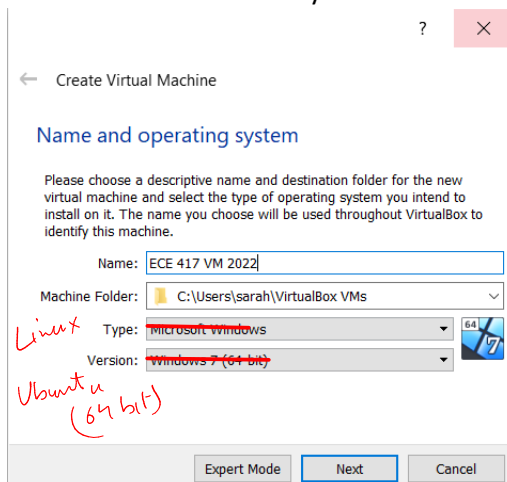

3. To setup a virtual machine from the VirtualBox Manager, click the green Add button
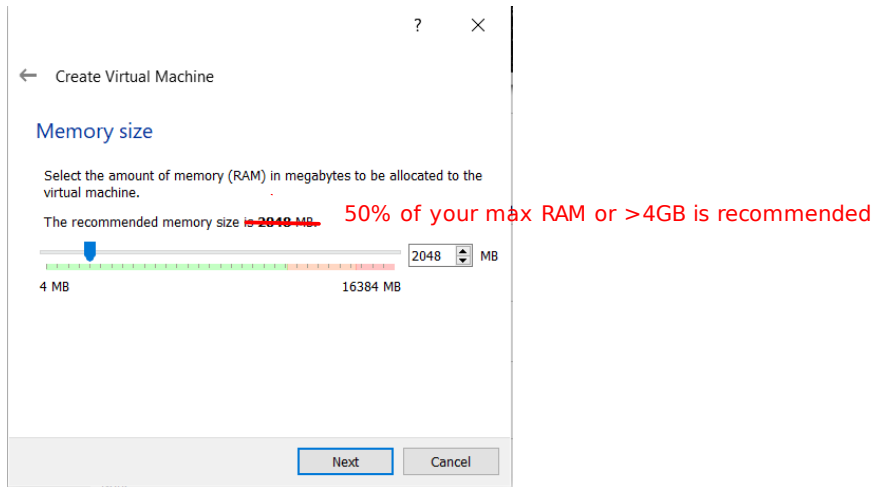

4. Create a virtual machine. The Type refers to the Operating System of your computer, most likely Windows
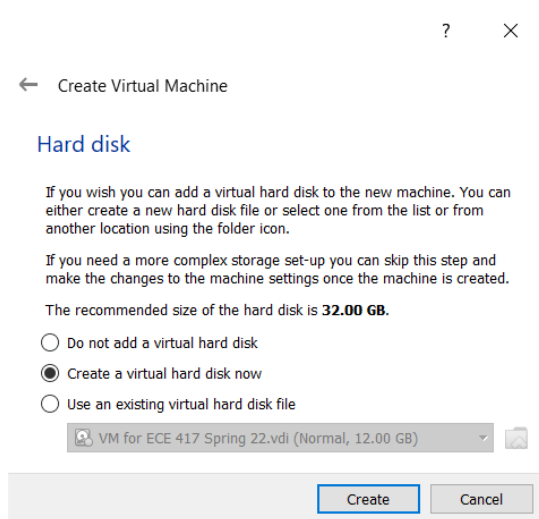   The default location is in your user folder. Feel free to change the location to your class folder:
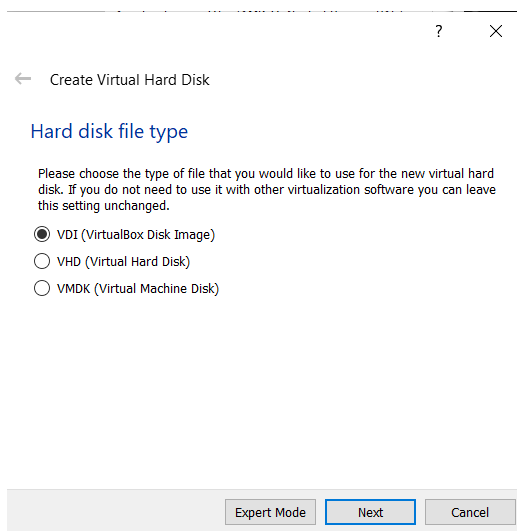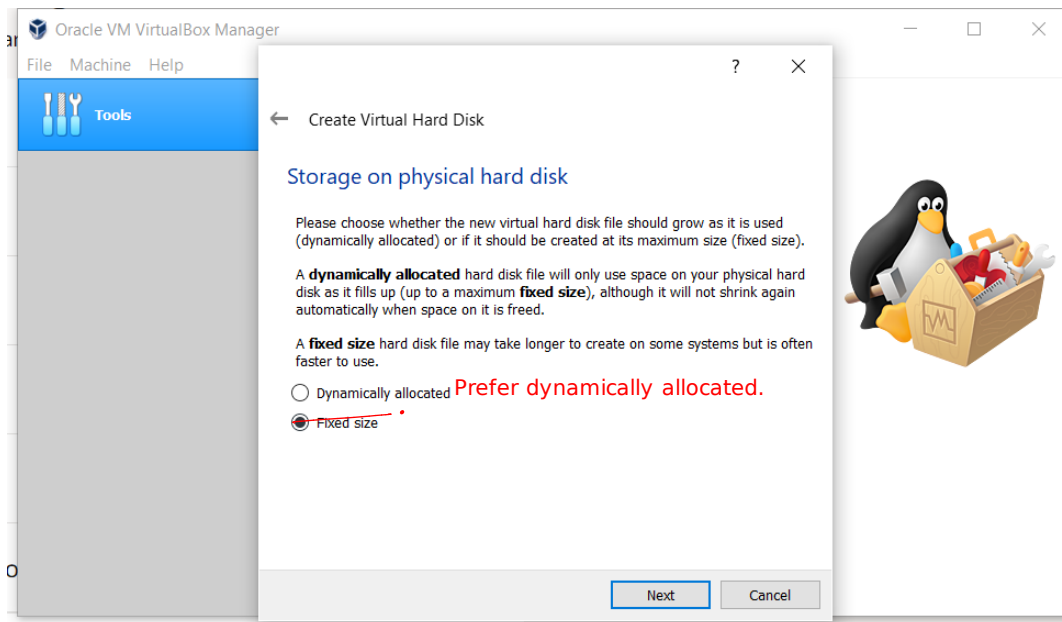
5. Memory size default is okay:

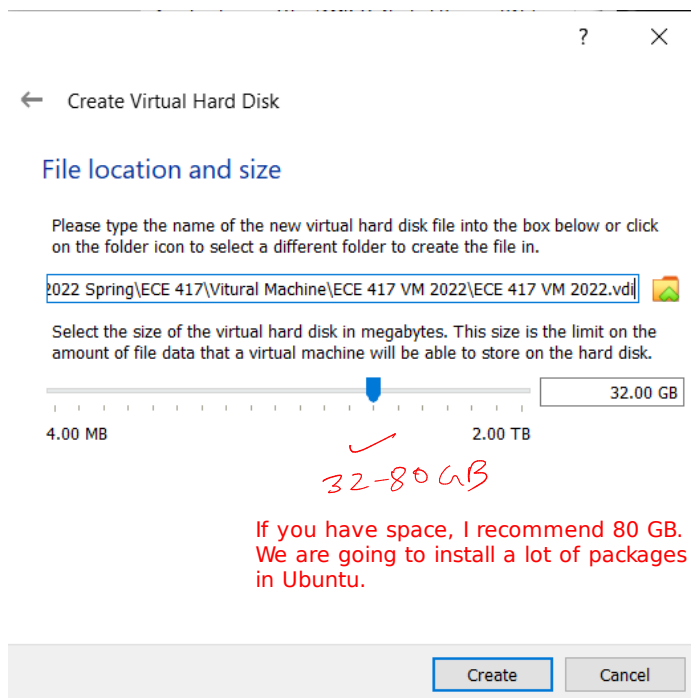50% of your max RAM or >4GB is recommended

6. Create a new virtual hard disk

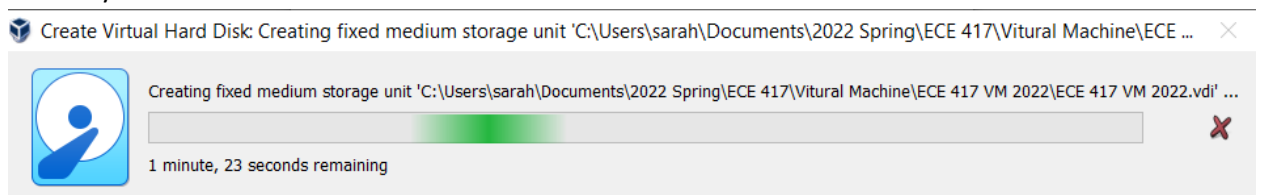7. Since we downloaded a desktop image file for Ubuntu, verify that the VDI disk file type is selected:
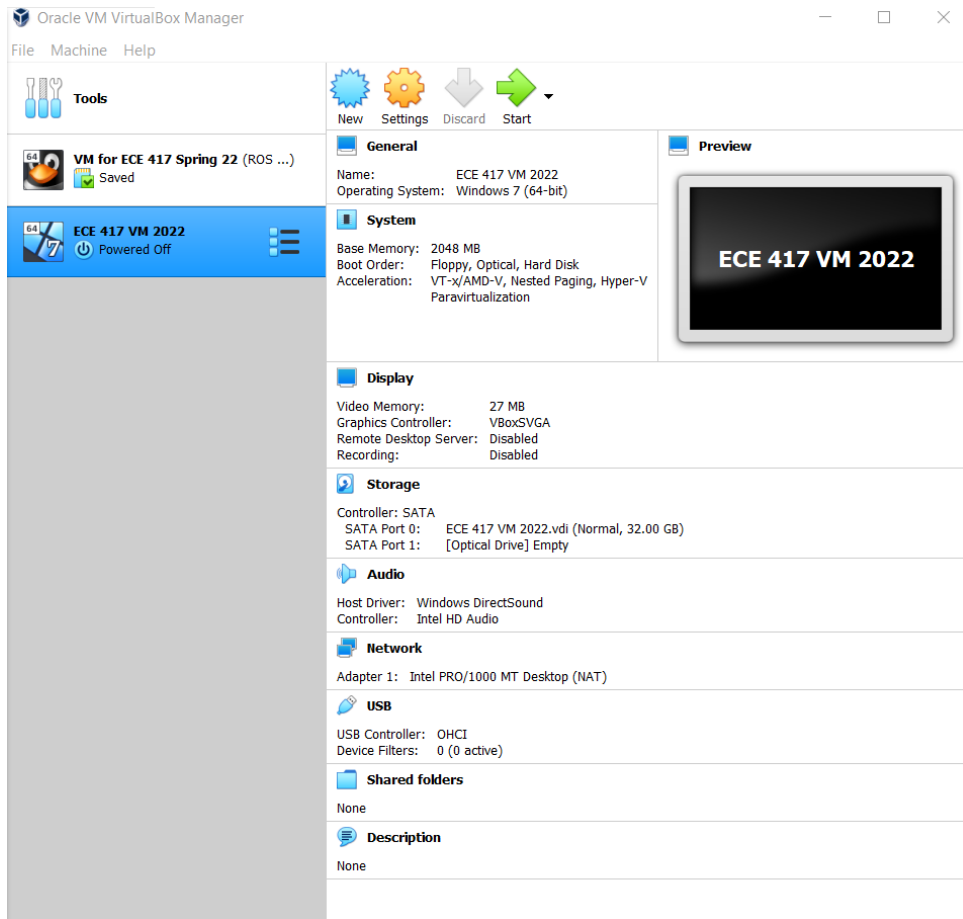
8. Select Fixed Size for the hard disk

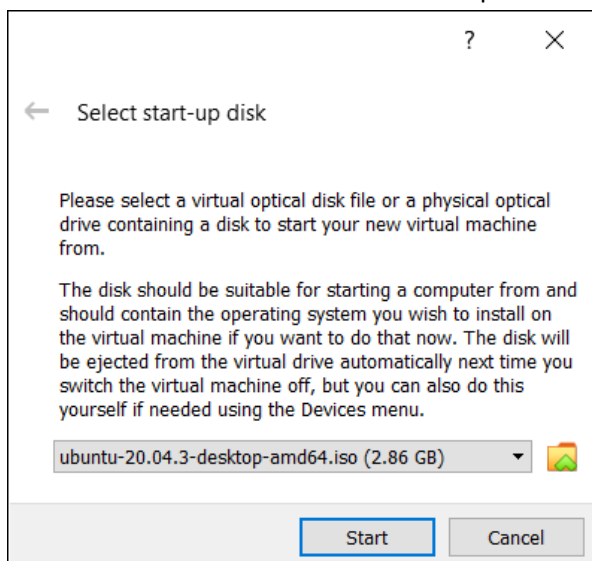9. Leave the file location and size defaults and click Create

10. This may take a while. Estimates are 3 minutes.

11. On your base machine, move the downloaded iso file into your class folder or wherever you saved the VM's virtual hard drive

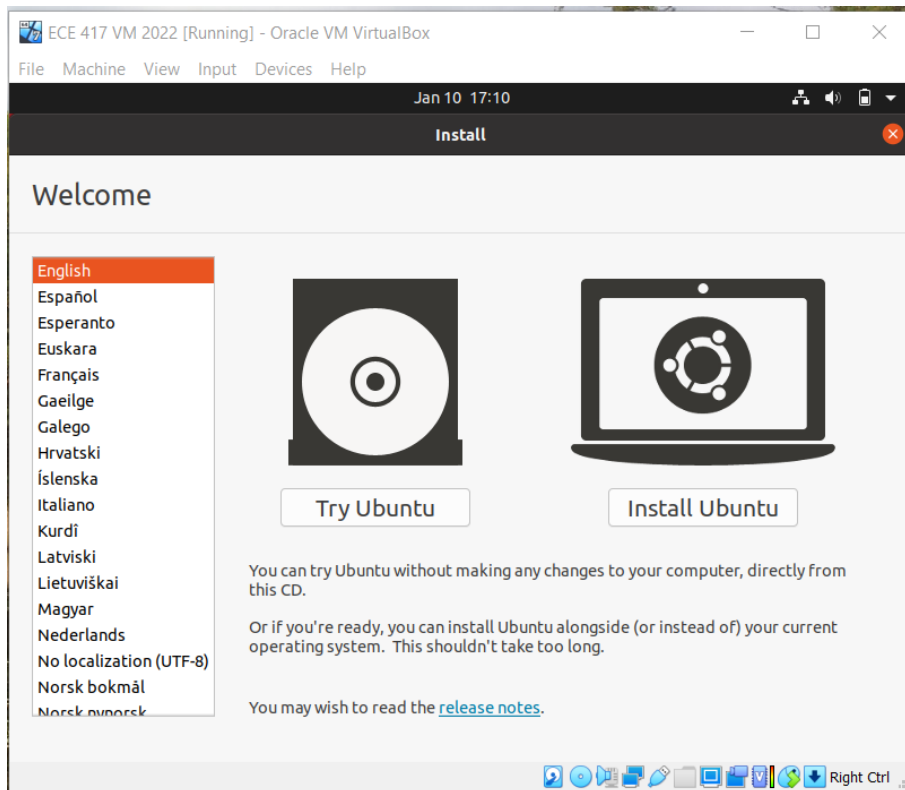12. From VirtualBox Manager, start the VM by double clicking it in the left-hand toolbar.

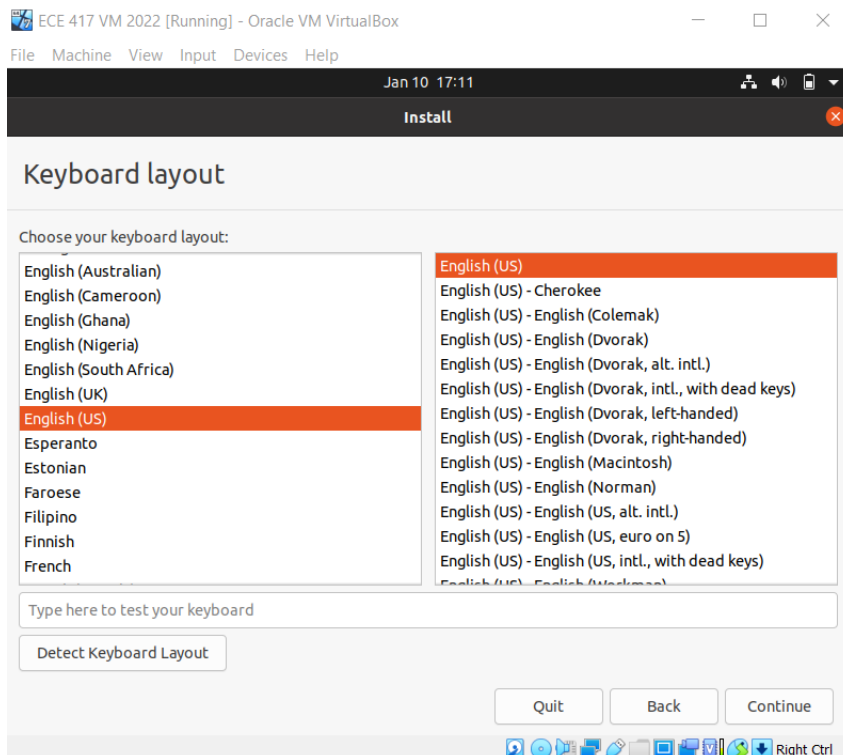13. Select the Ubuntu iso file for the start-up disk

Ubuntu OS will begin startup. This may take a few minutes.
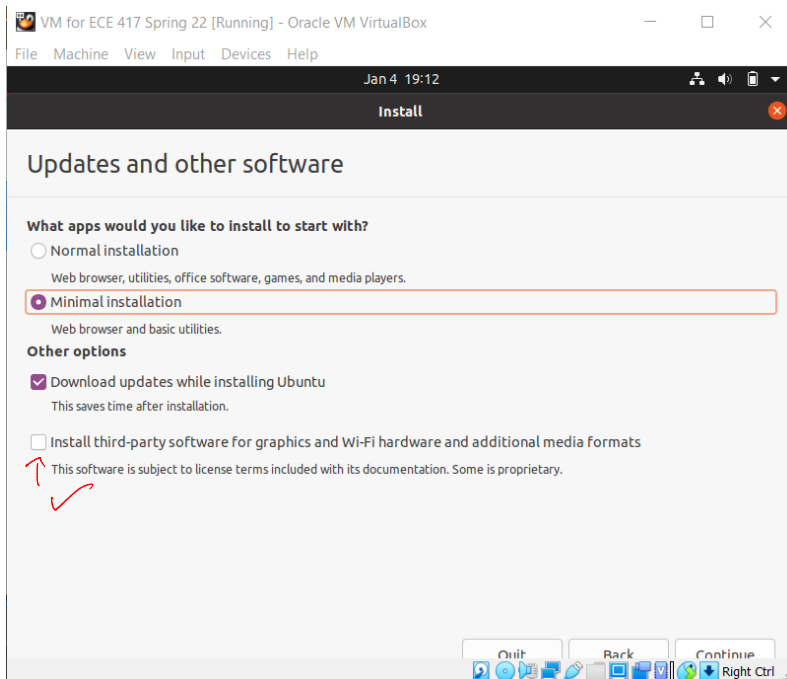
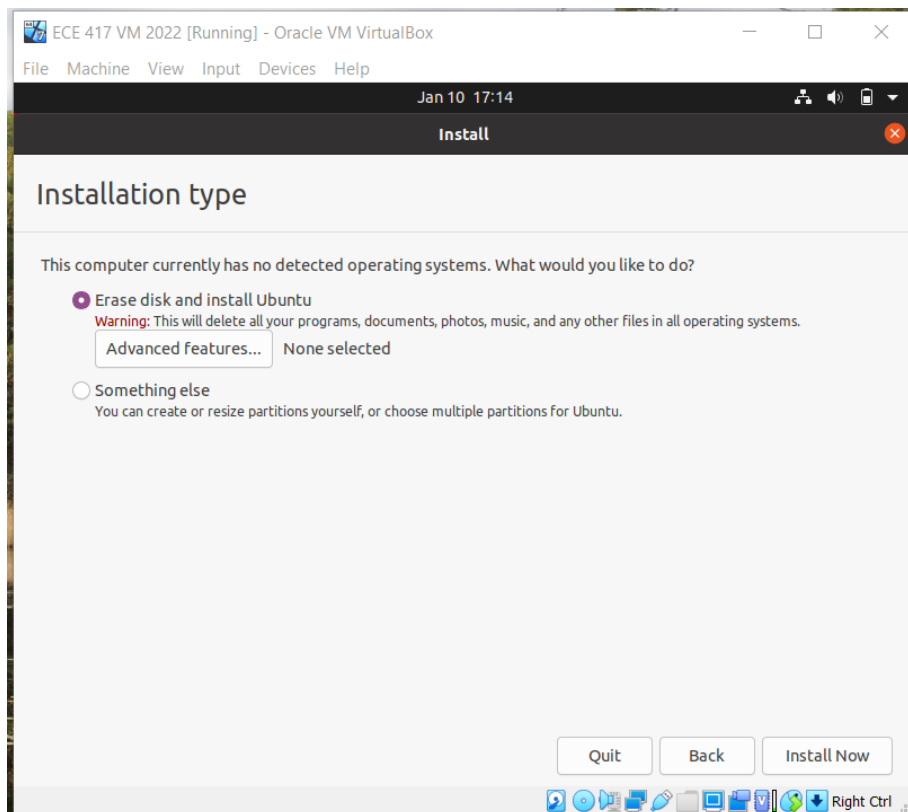14. Verify your preferred language is selected

15. Click Install Ubuntu

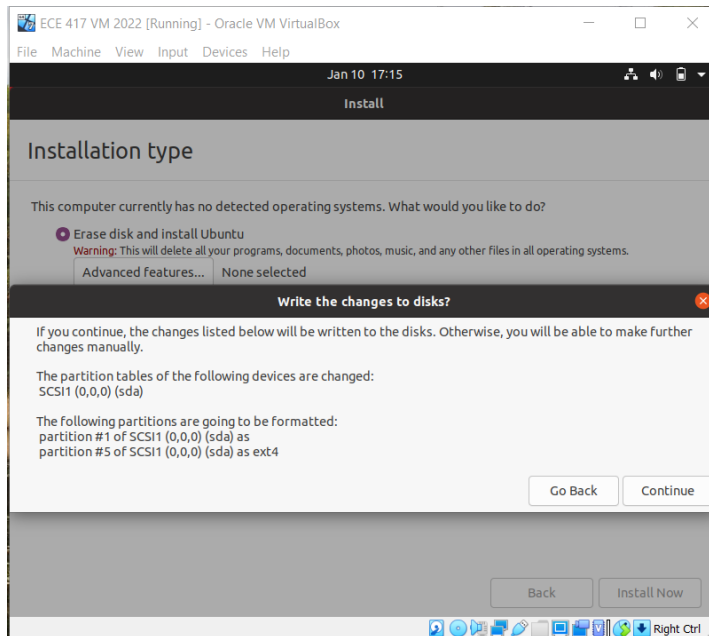16. Verify your preferred language and dialect are selected and click continue

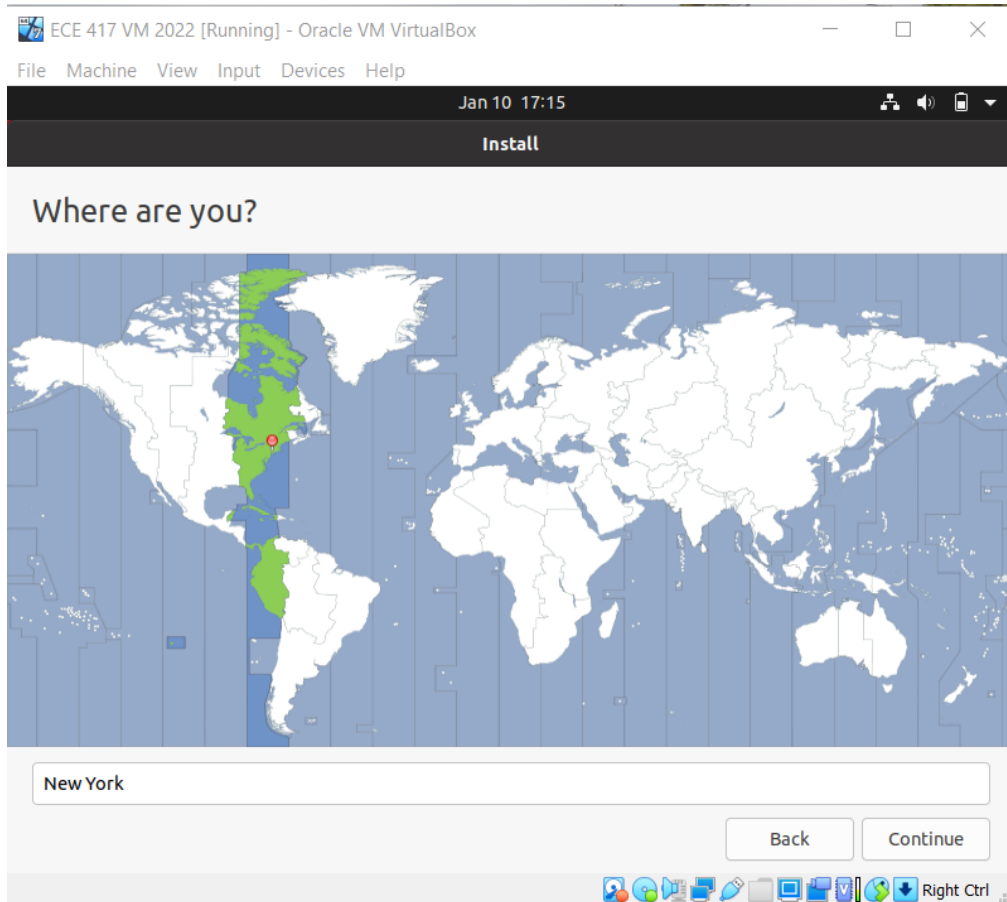17. Select Minimal Installation and Download Updates while installing

18. Select Erase disk and install Ubuntu. Since we created a new virtual hard disk, it is blank and there is nothing that will be lost.
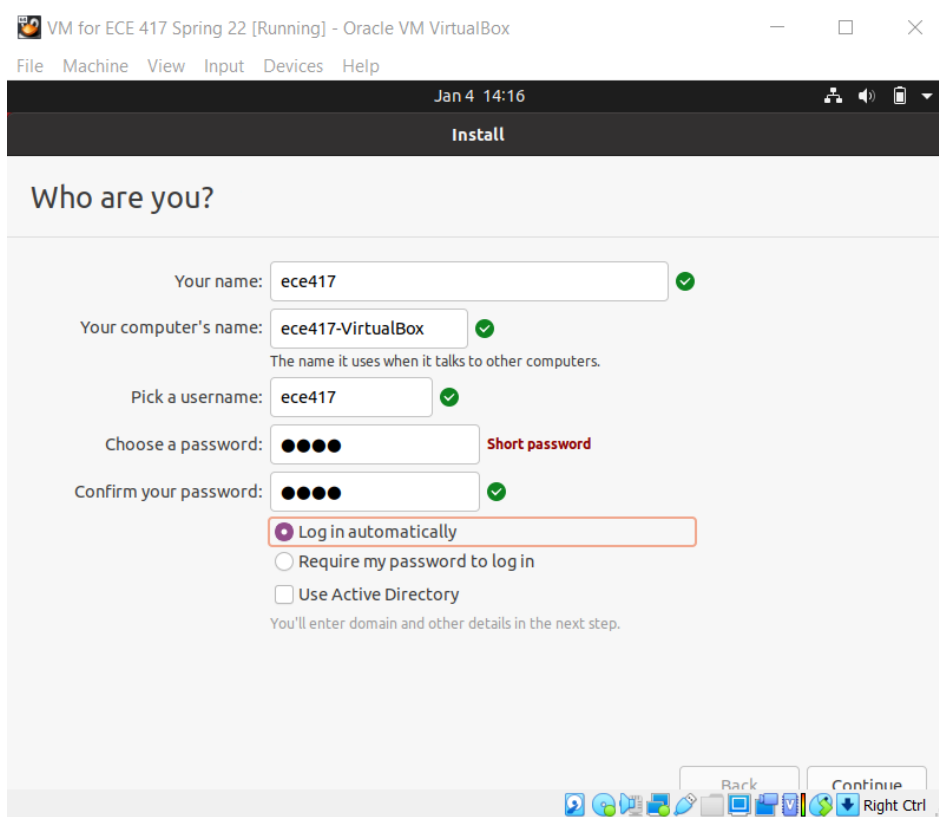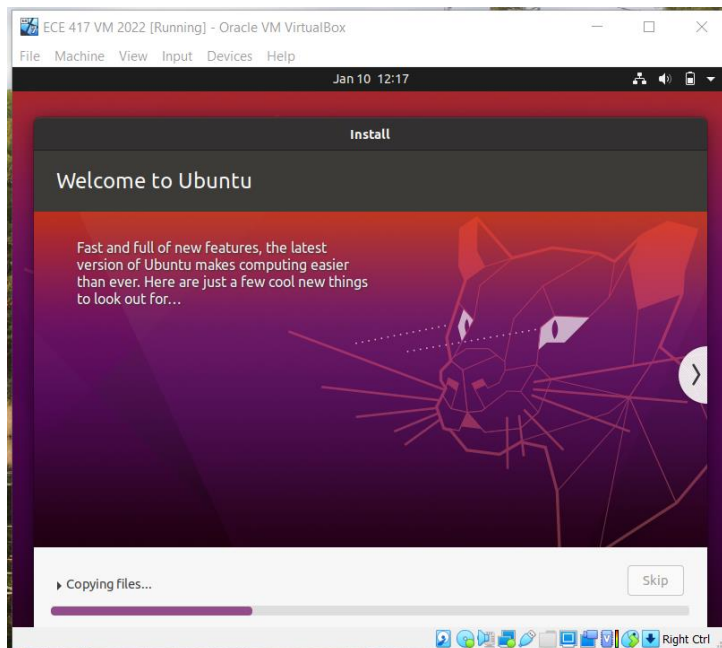
19. Press continue.

20. Select the correct time zone:

21. Create an account for the new OS. Make it easy to remember, and a password that is short and easy to input (you will have to input the password regularly for ROS setup commands). Select "Log in Automatically". All other defaults are okay.
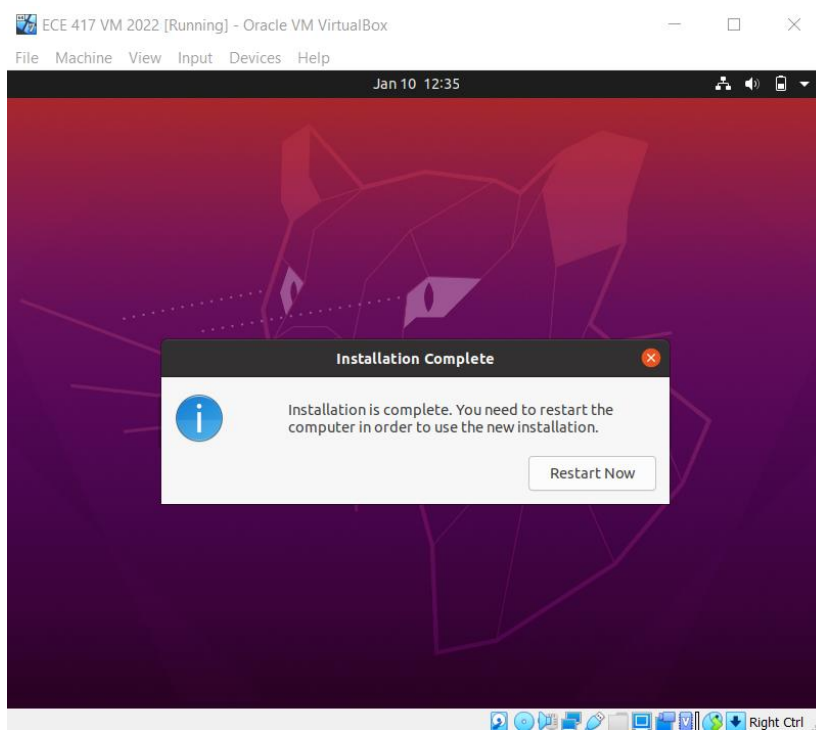

22. Wait for VirtualBox to finish setting up Ubuntu! This may take several minutes. Estimate: 17 minutes.
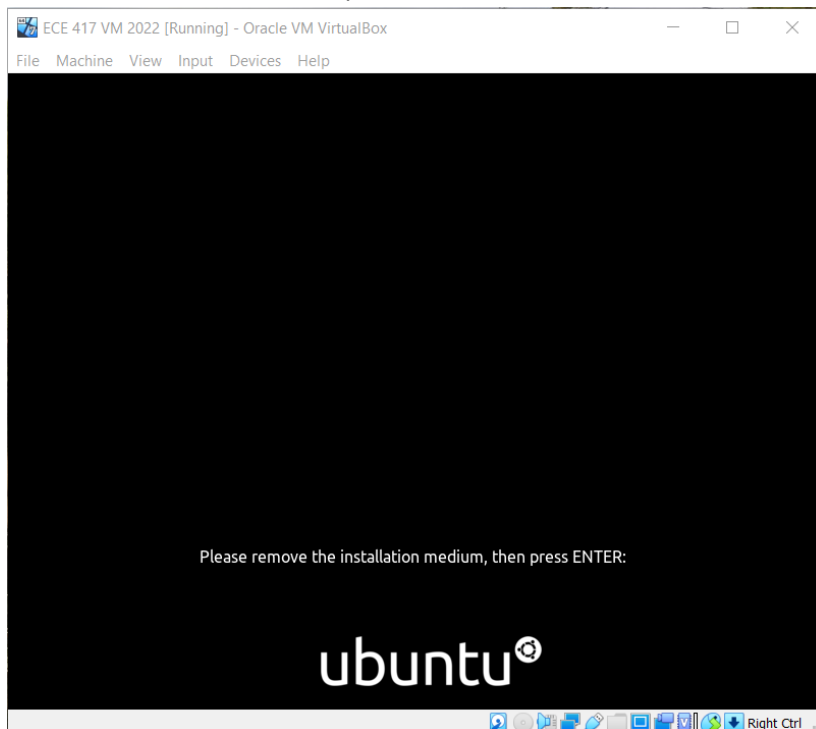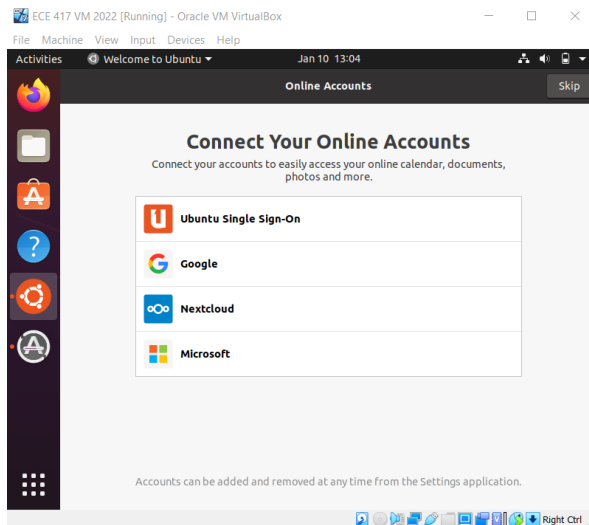
23. Restart
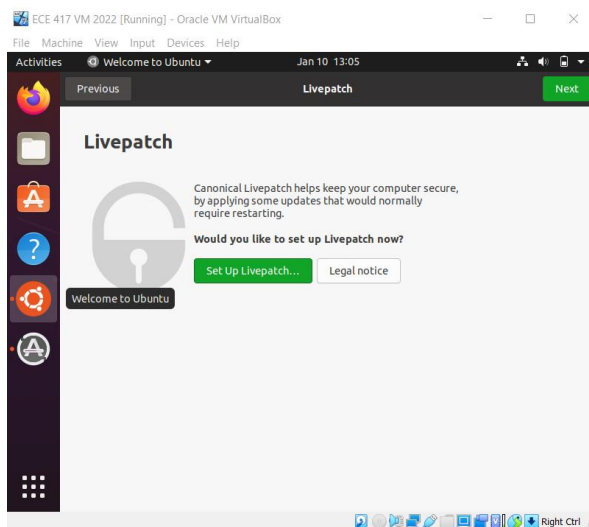

24. Click inside the window and press enter:

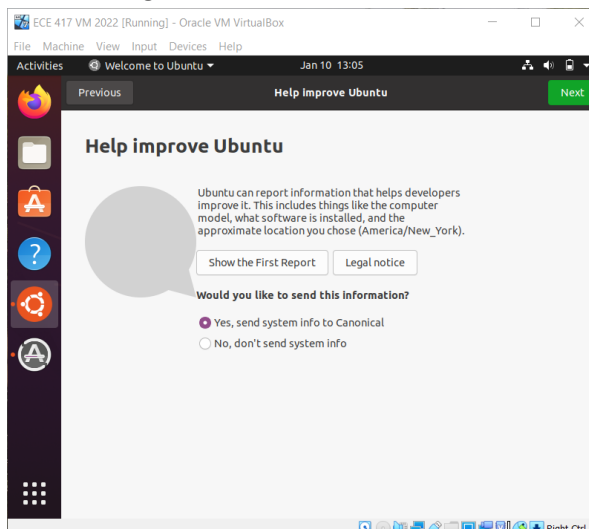25. Skip in the upper right hand corner of Online Accounts
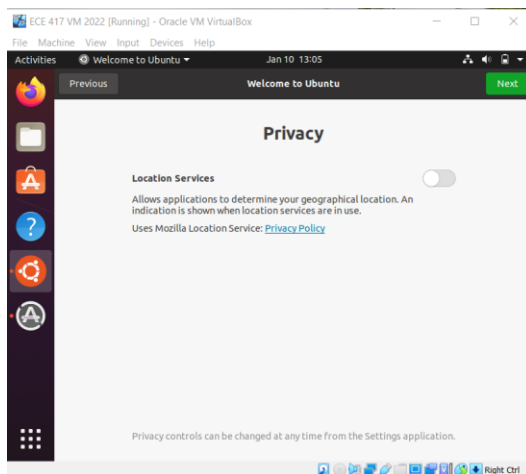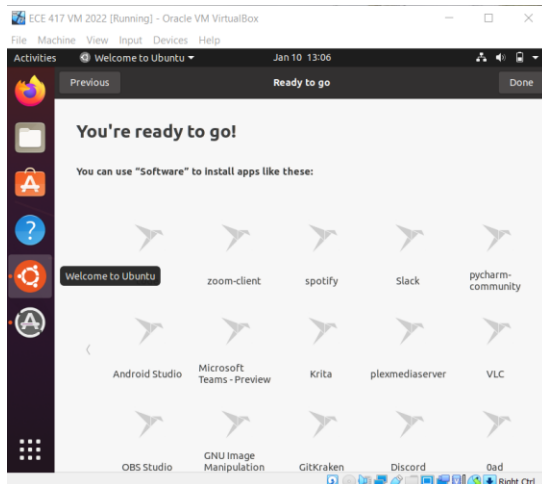

26. Click next

27. Click next again

28. Leave location off

29. Press done to close

30. Feel free to update ubuntu. However you must let the update finish before downloading ROS to ensure all tools are available for the ROS download. Estimated time: 20 minutes