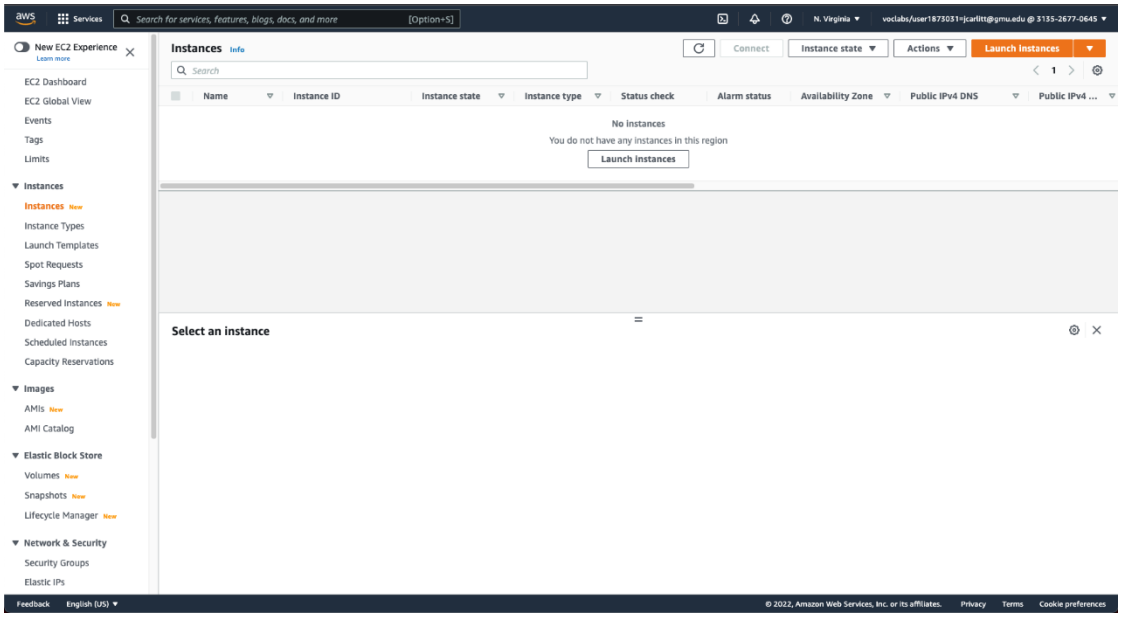
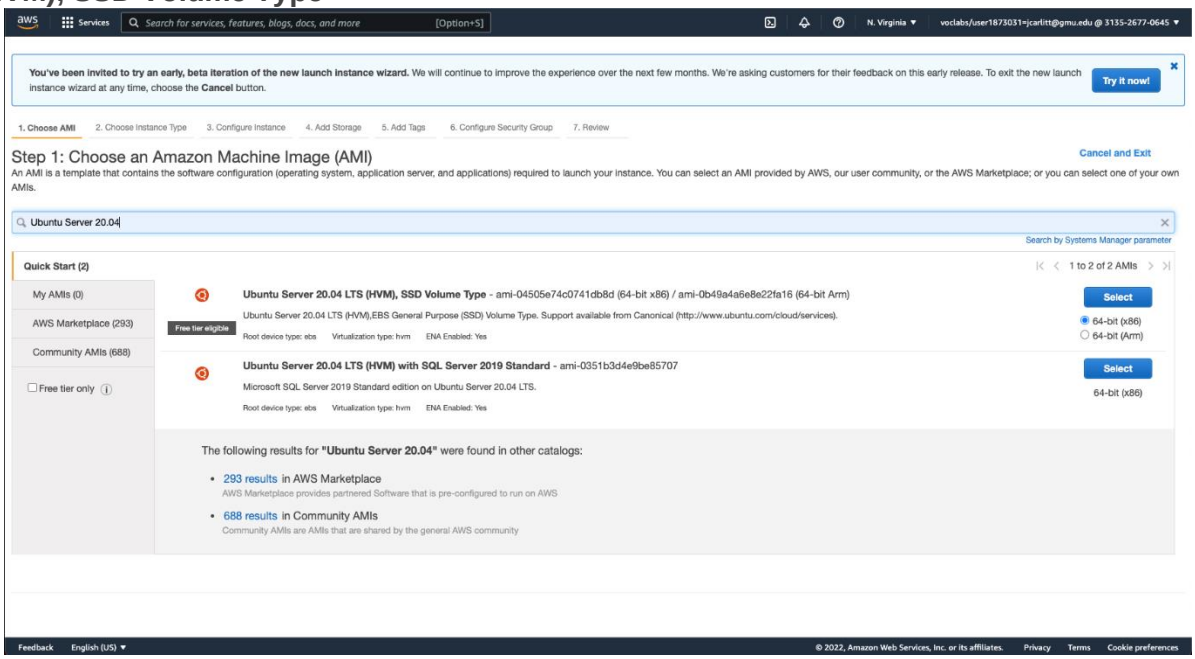
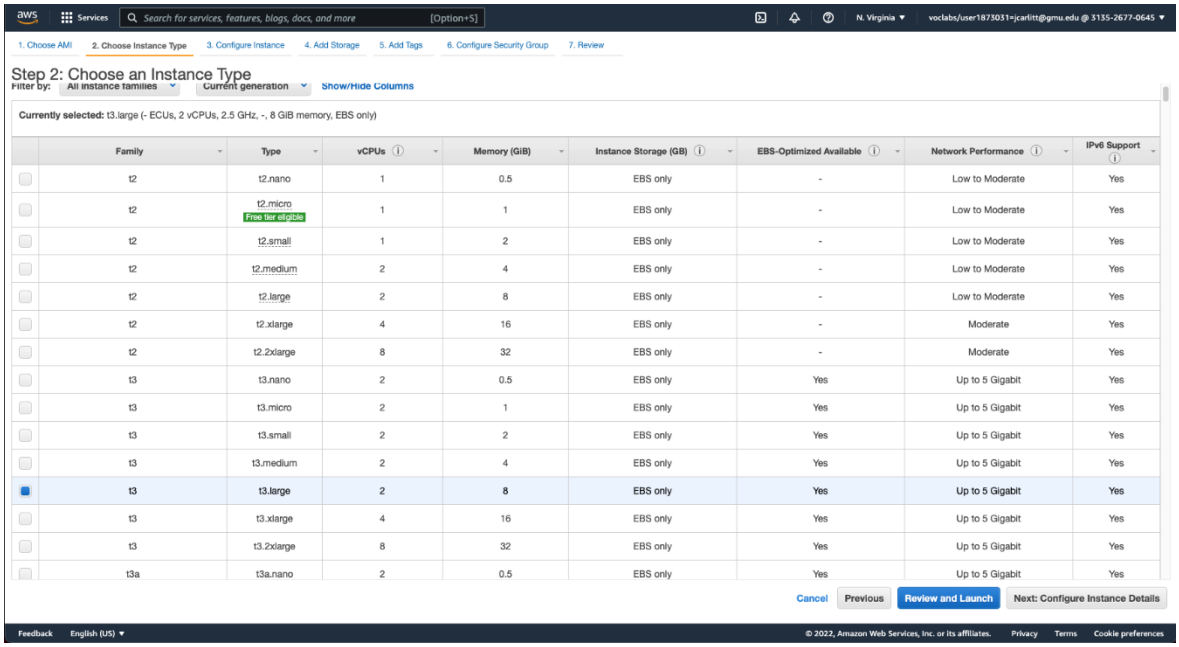
Reference Guide

Creating EC2 Instance in AWS Academy Leaner Lab

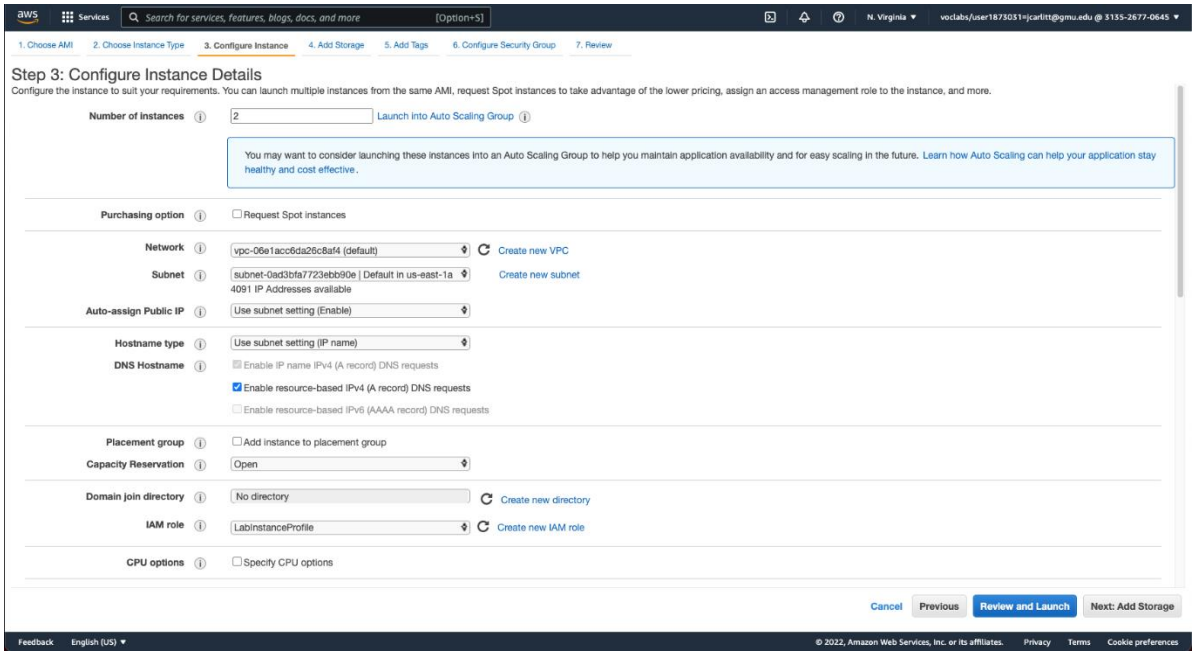
1. Log into the AWS Learner application
2. Traverse to the EC2 Instance page.
   a. 

3. Select Launch Instances
4. Search for the Ubuntu Server 20.24 Instance and select the first one: **Ubuntu Server 20.04 LTS (HVM), SSD Volume Type**
   a. 

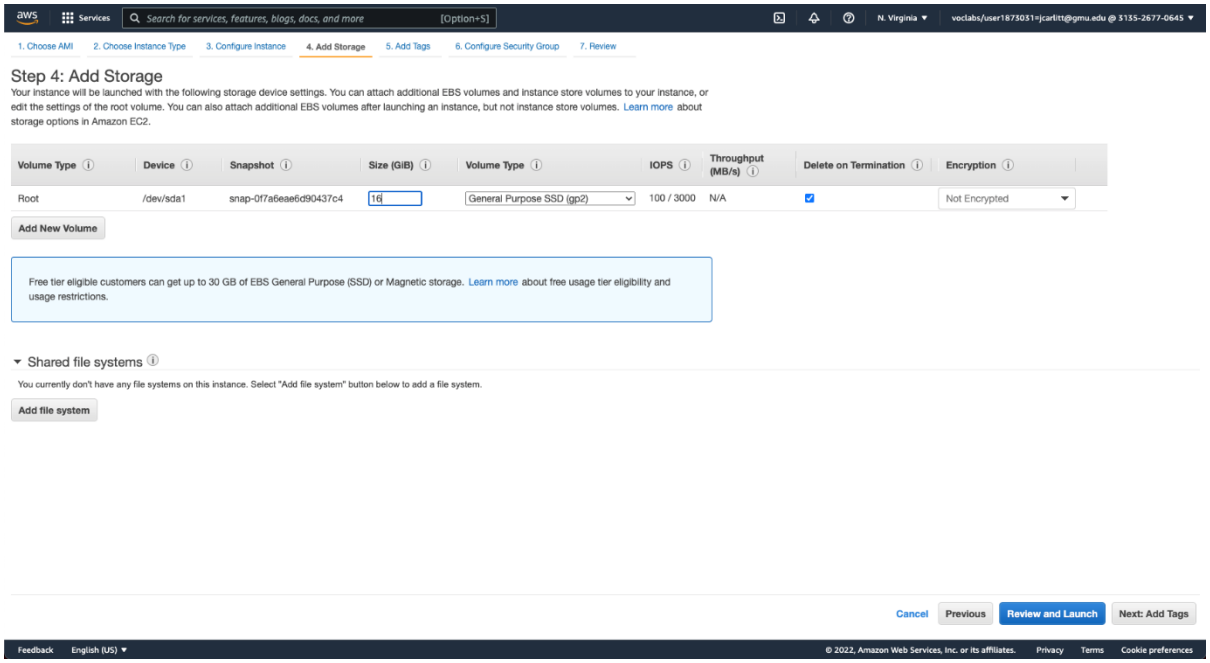
5. Select the t3.large for example, and click “Next: Configure Instance Details”

a. 

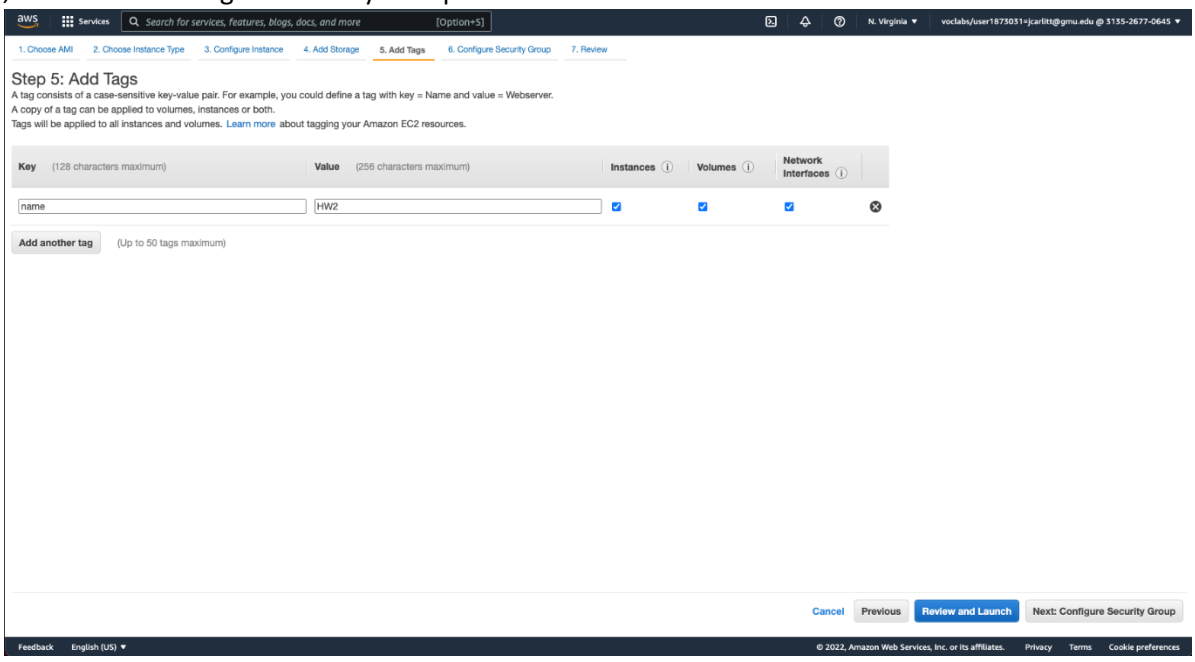
6. Now edit the number of instances (in this example we are doing 2), and change the subnet to your region (us-east-1), and select the IAM role to be LabInstanceProfile. Then click “Next: Add Storage”

a. 

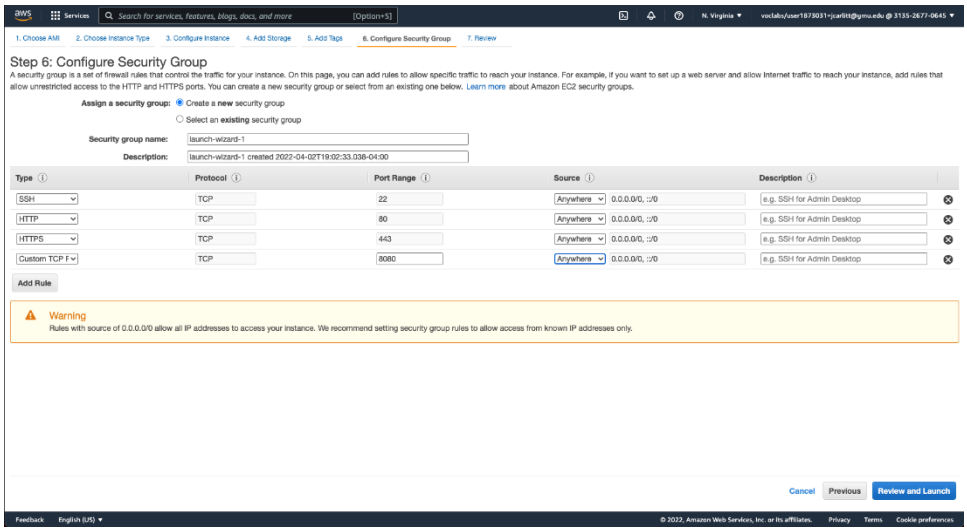
7. Within Add Storage, change the size to 16 since we have money on this account. Click “Next: Add Tags”

a. 

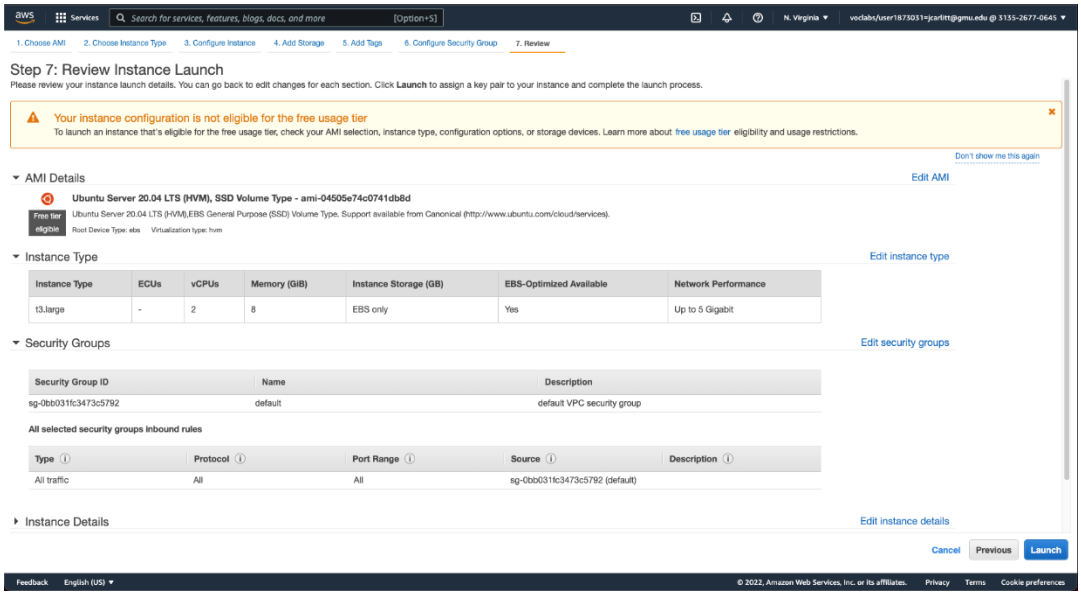
8. Within Add Tags, click the add tag button. Once you do that, you should see this screen. Once entered, click “Next: Configure Security Group”

a. 

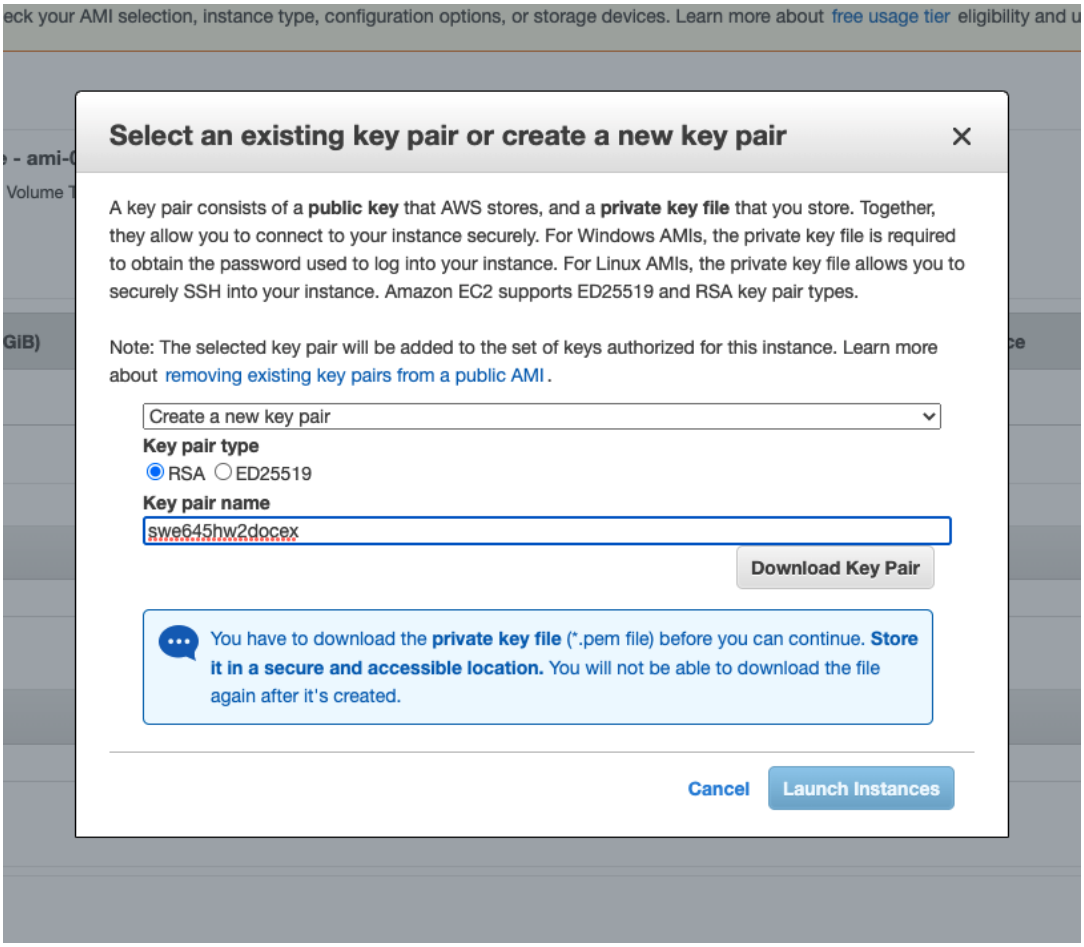
9. Click, select create a new security group and allow for traffic anywhere on ports 8080, 80, 443, and 22. Once complete, click “Review and Launch” button.

a. 

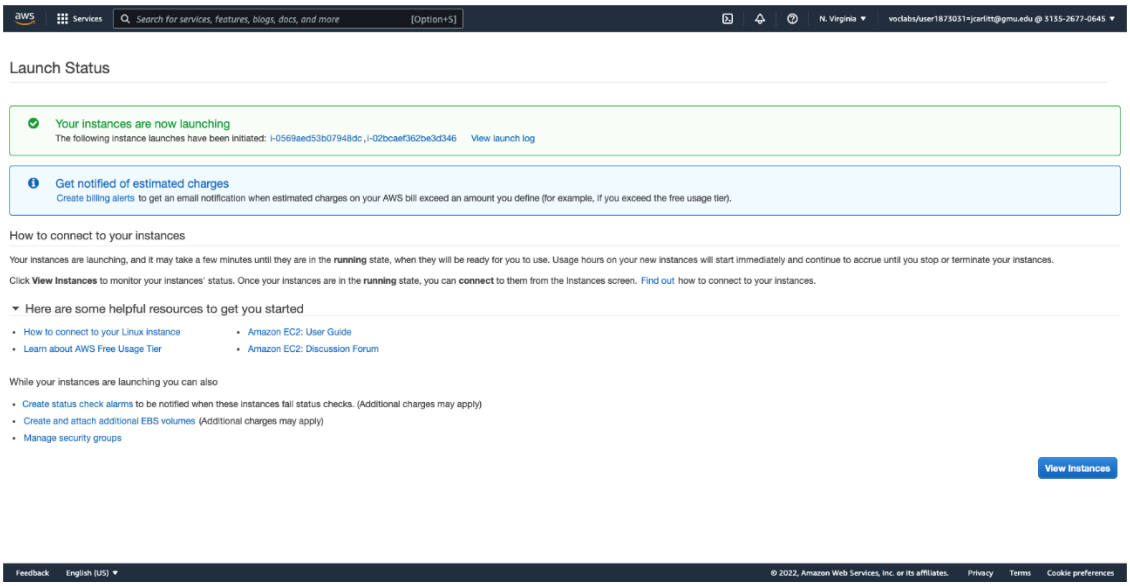
10. Review the configurations and click launch.

a. 

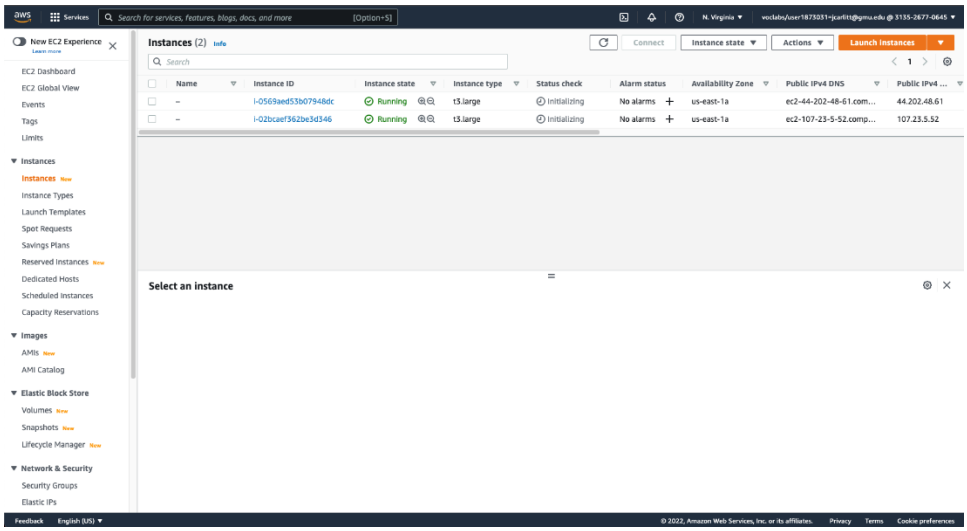
11. You'll be brought to a popup that asks you to select the key pair. If you do not have one already, select the create option and **download the key pair .pem file (Make sure you keep this because you'll need it for future steps).** Then click launch instances

a. 

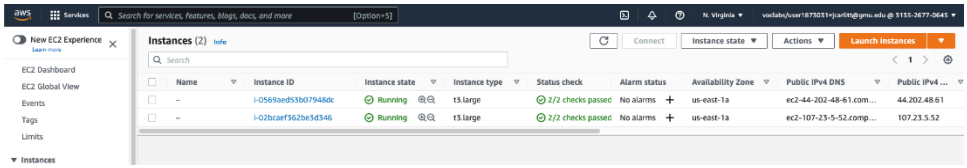
12. You'll be brought to this page once you have clicked launch instances. You can click view instances to view.

a. 

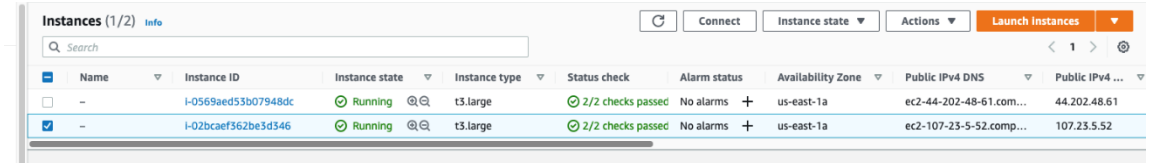
13. It may take a few minutes for the various instances to be fully deployed and ready. But once they are, the Status check will be green.
    a. Unready view where they are still initializing.

i. 

b. Ready state

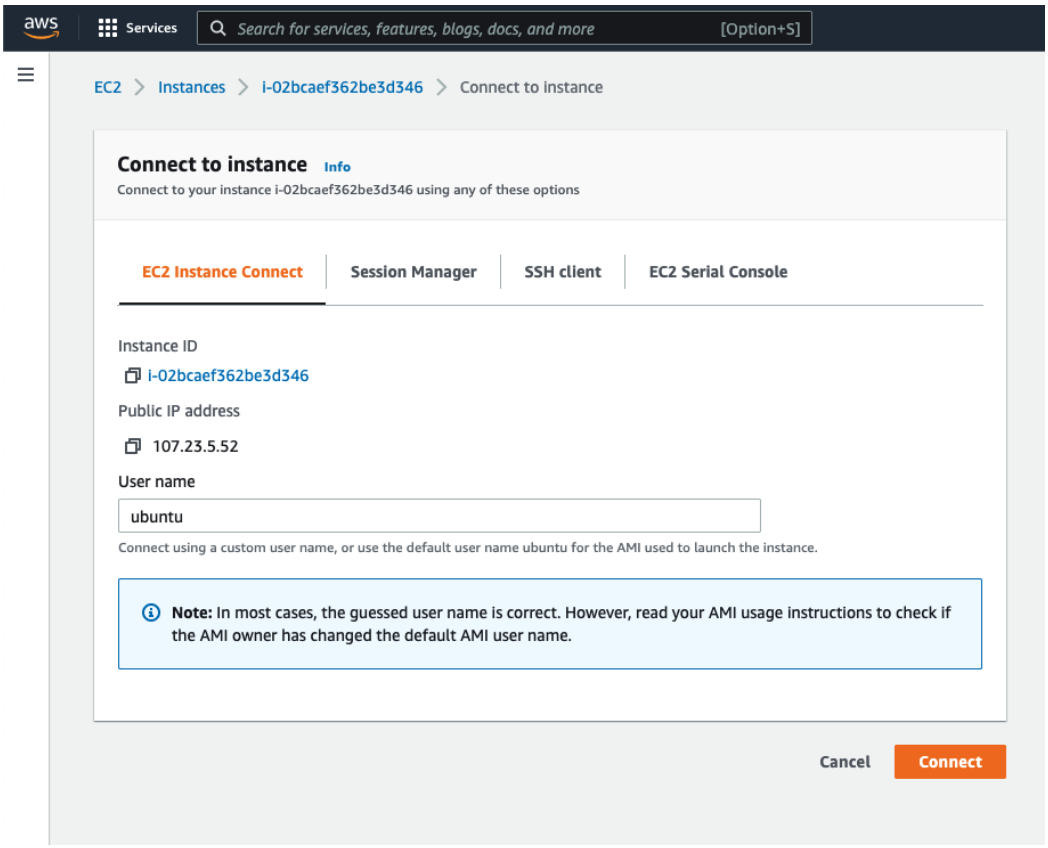
i. 

14. Now we can connect to instance1. Select the instance1 and then click connect.

i. 

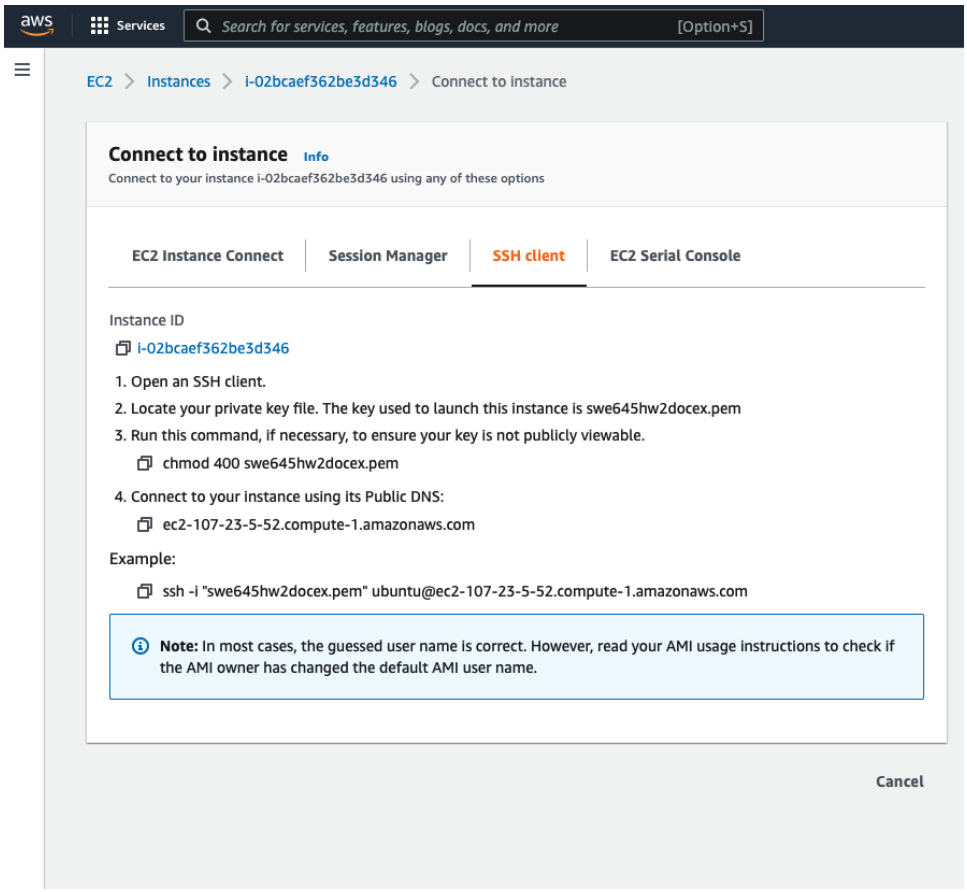
b. You will be brought to this page upon clicking connect.

i.



c. If you have SSH capabilities, click that tab. Copy the shh command and paste it into your terminal or PowerShell window.

i.

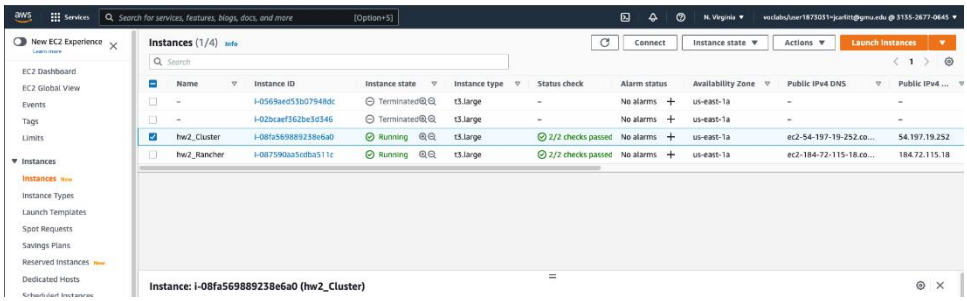


d. In your console, change directory (cd) to where your pem file is downloaded too. Run chmod 400 on your pem file to tighten the security rules on it. Then paste that copied command into the line and hit enter to connect.
   i. cd </path/to/.pem file>
   ii. chmod 400 swe645hw2docex.pem
   iii. ssh -i <pem file name> ubuntu@<ec2 instance address>
e. In the console, type yes for connecting
   i.

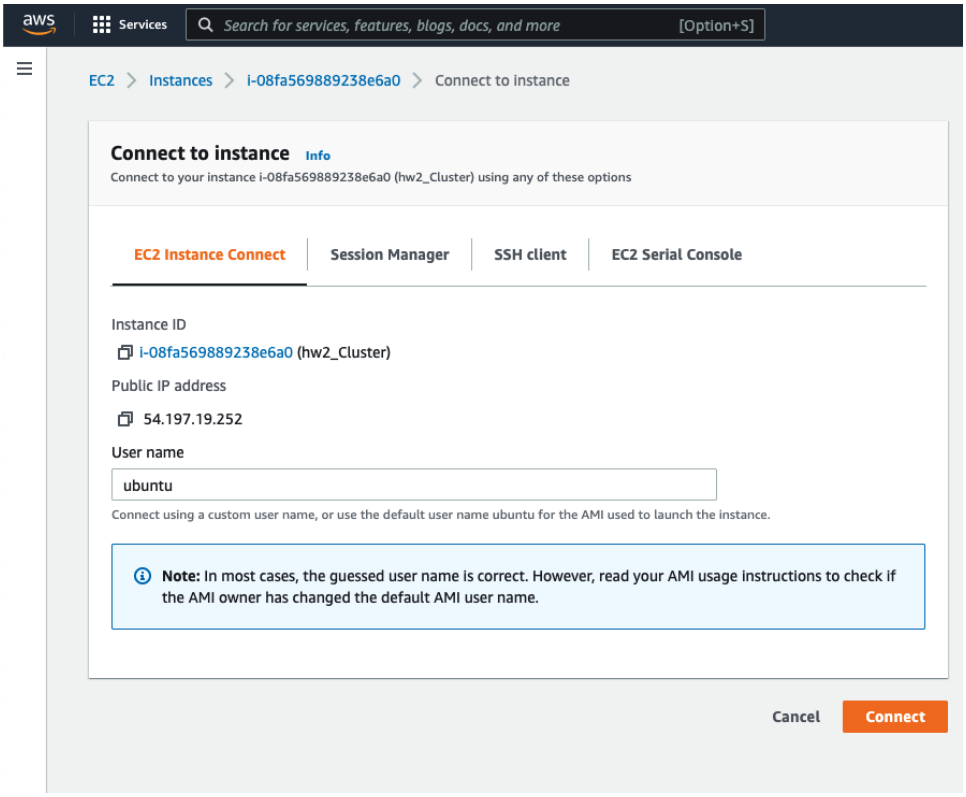
```
The authenticity of host 'ec2-184-72-115-18.compute-1.amazonaws.com (184.72.115.
18)' can't be established.
ECDSA key fingerprint is SHA256:8zr9DLNIK1T5ufQK30h7uQPstcrDXmk+WZfg3QUVVBw.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
```

f. Now that we are in the EC2 instance, update the instance by typing: sudo apt-get update
g. Once it is finished updating, install docker within the instance. Type: sudo apt install docker.io

15. Now we can connect to instance2. Select the instance and then click connect.

a. 

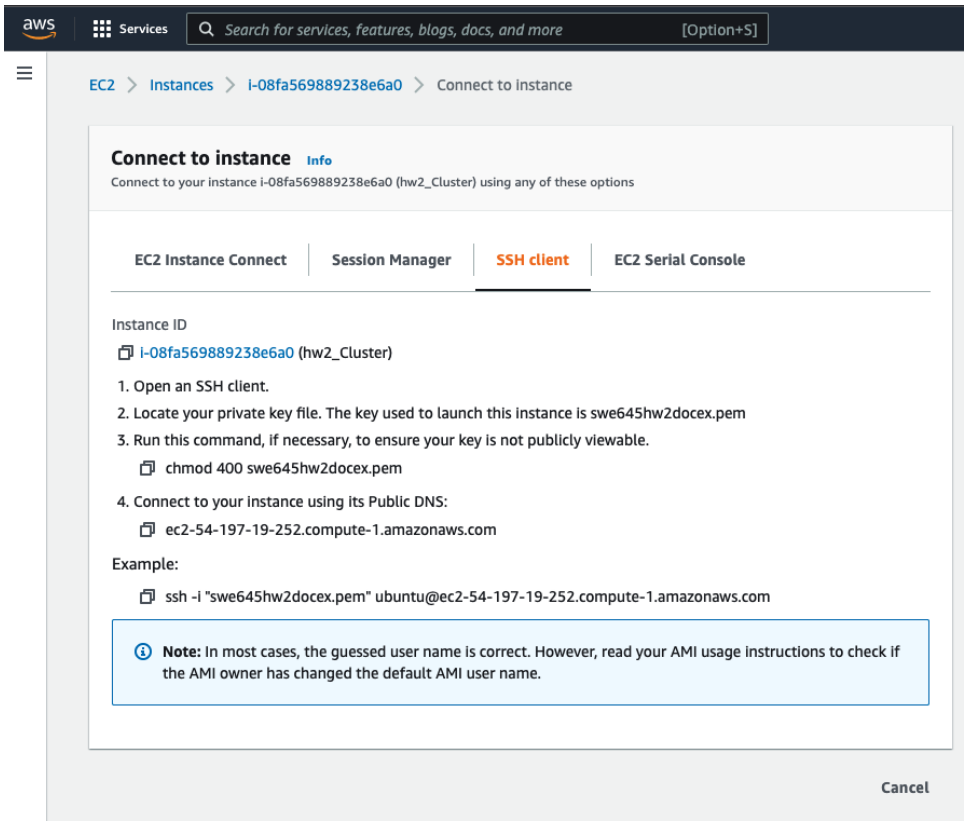
b. You will be brought to this page upon clicking connect.



i.

c. If you have SSH capabilities, click that tab. Copy the shh command and paste it into your terminal or PowerShell window.

i.



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    i. cd </path/to/.pem file>
    ii. chmod 400 swe645hw2docex.pem
    iii. ssh -i <pem file name> ubuntu@<ec2 instance address>
e. In the console, type yes for connecting
    i.
```
The authenticity of host 'ec2-54-197-19-252.compute-1.amazonaws.com (54.197.19.2
52)' can't be established.
ECDSA key fingerprint is SHA256:lJSLpjHIBuAnIxfVUrzdZsgA77VDUdvsj2jDVwgbewc.
Are you sure you want to continue connecting (yes/no/[fingerprint])? YES
```
f. Now that we are in the EC2 instance, update the instance by typing: sudo apt-get update
g. Once it is finished updating, install docker within the instance. Type: sudo apt install docker.io