CS 451
Fall 2024
Assignment 1
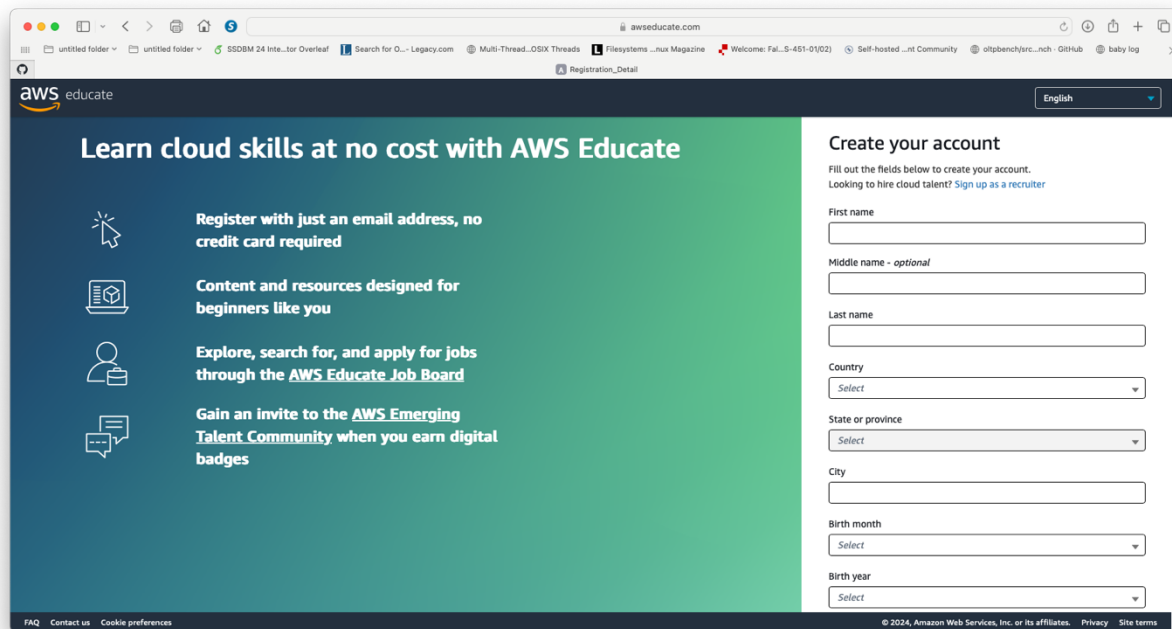**Due:** September 4th at 11:59pm CST/CDT
Worth 50 points

This assignment is to get you used to deploying vm's in AWS.

Part1:
For steps, 3-6 please take a submit screen shots. Also please answer the few questions.

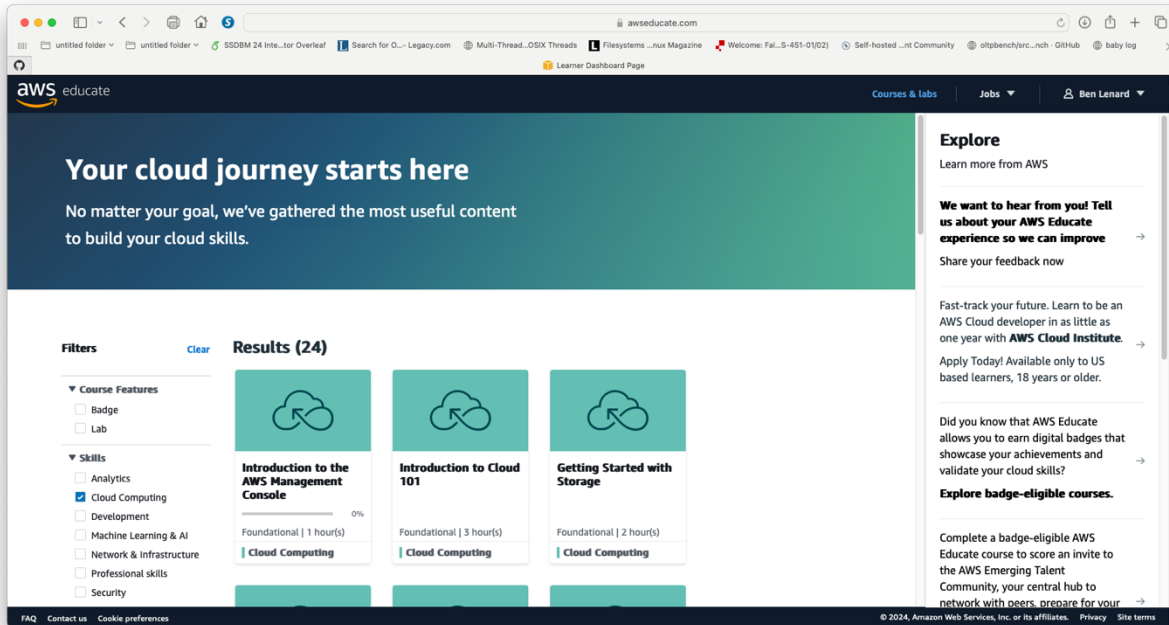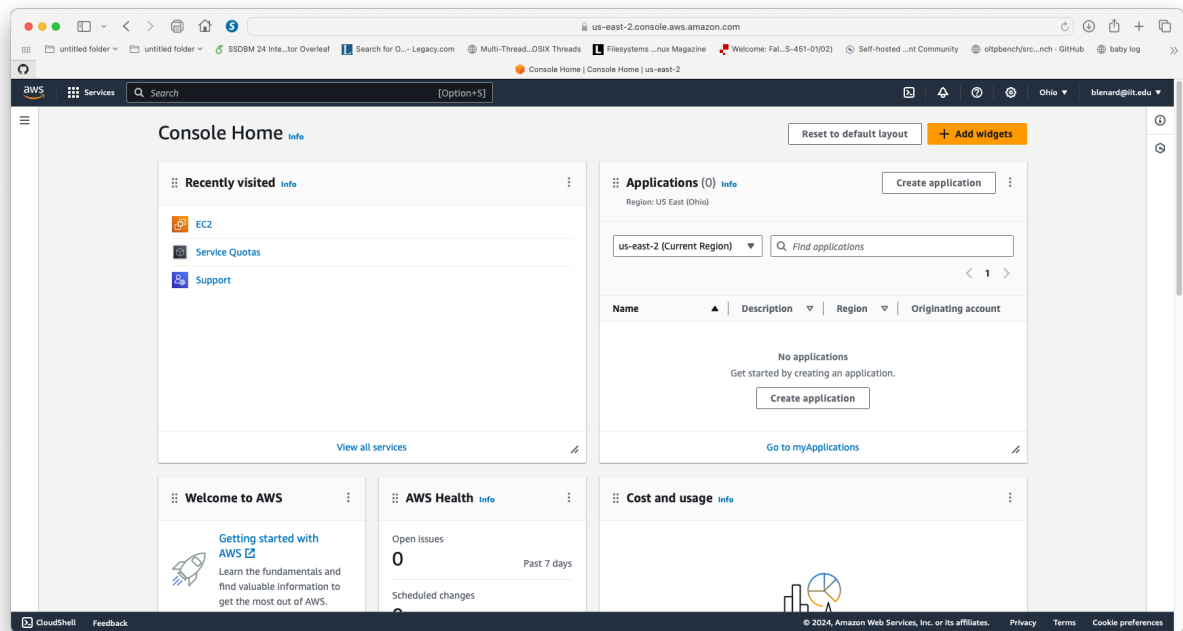1) Sign up for an AWS Account with your IIT email
https://www.awseducate.com/registration/s/registration-detail?

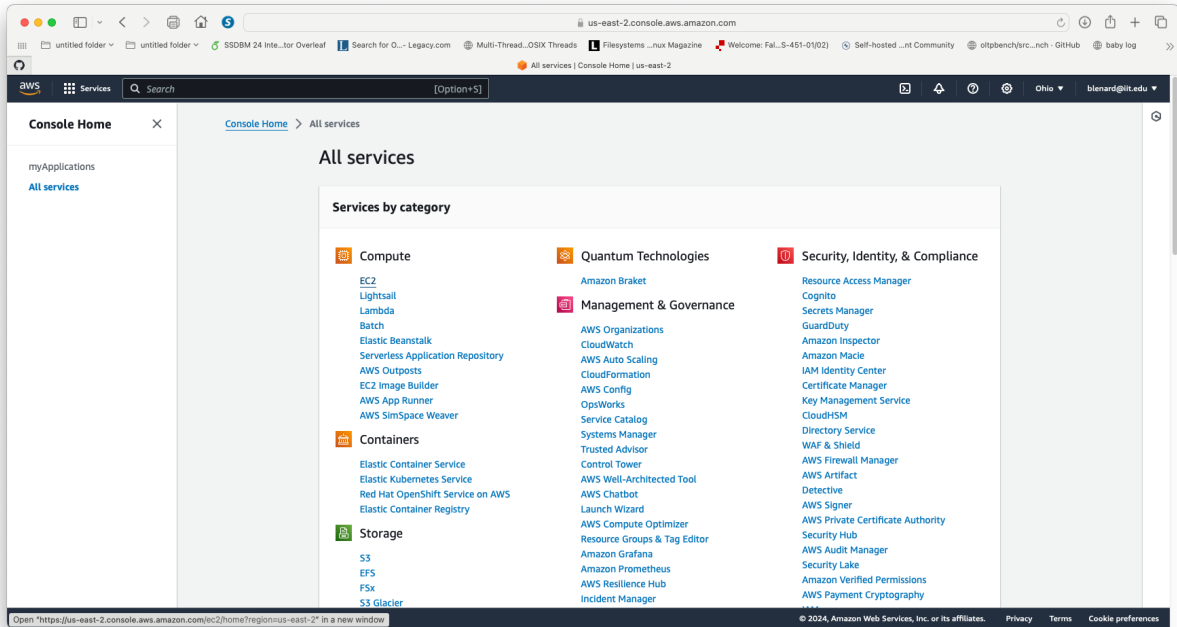2) Login into AWS Educate https://www.awseducate.com/
   a. Take Introduction to AWS Management if you have never used AWS
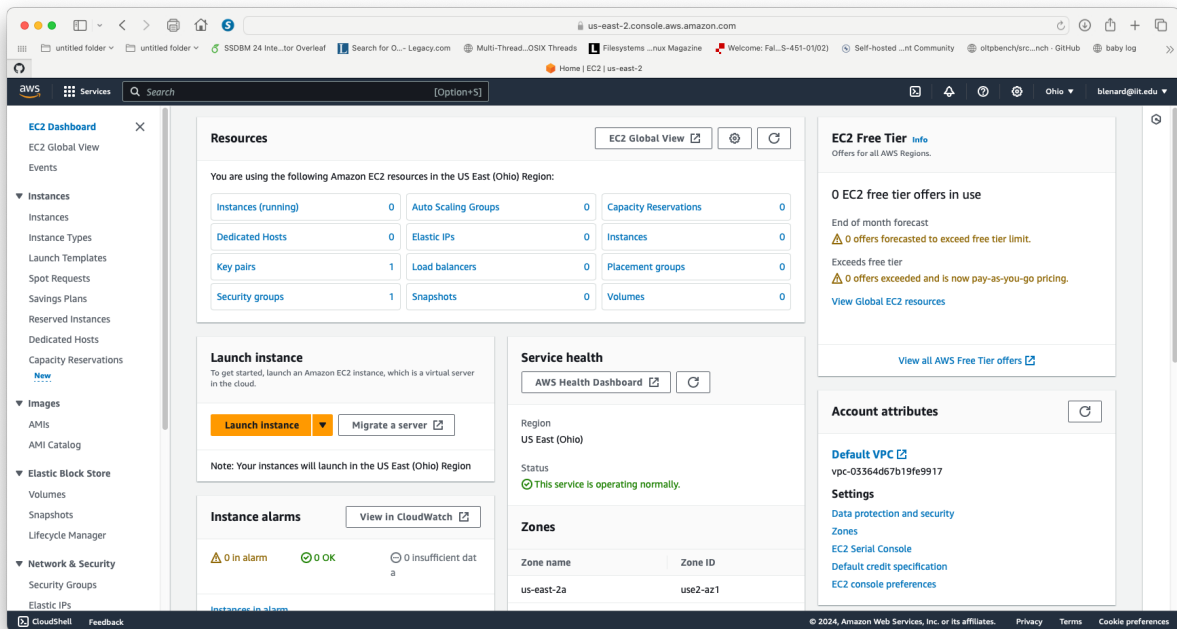   b. Also take Cloud 101 if you have never used AWS

3) Let's deploy your 1st vm , login in to http://aws.amazon.com
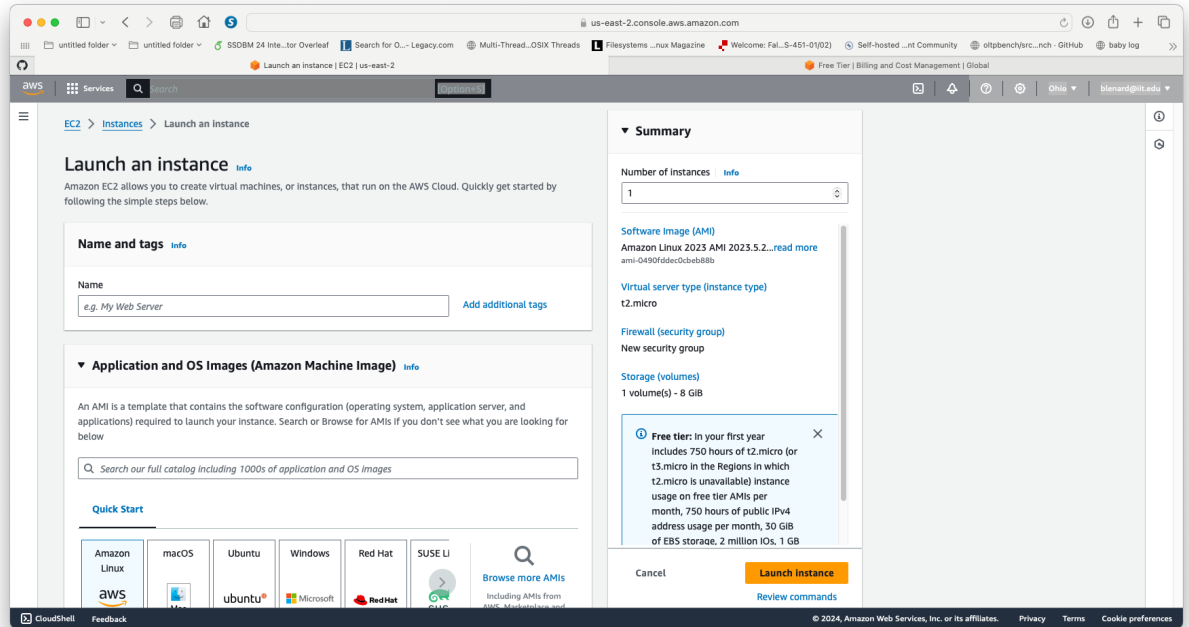
    a. It should look like this:

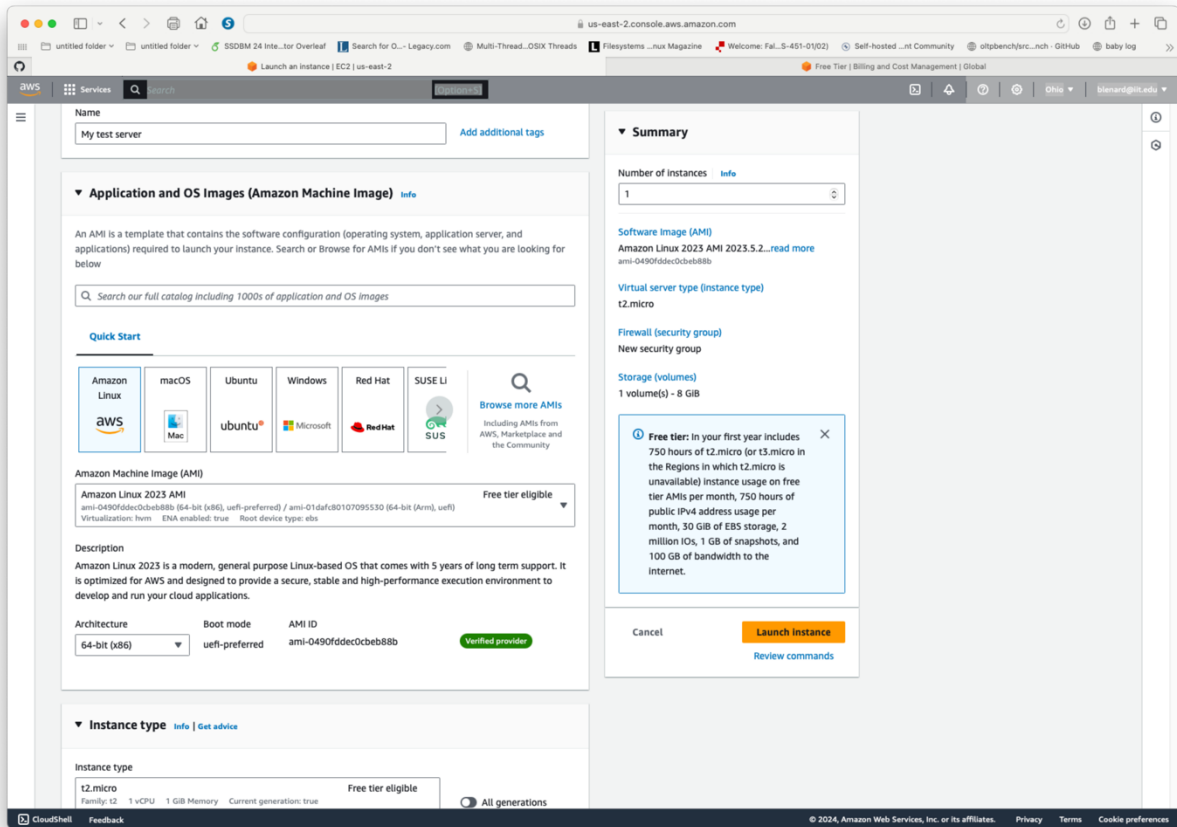   b. Search for EC2 by clicking view all services

c. Click EC2

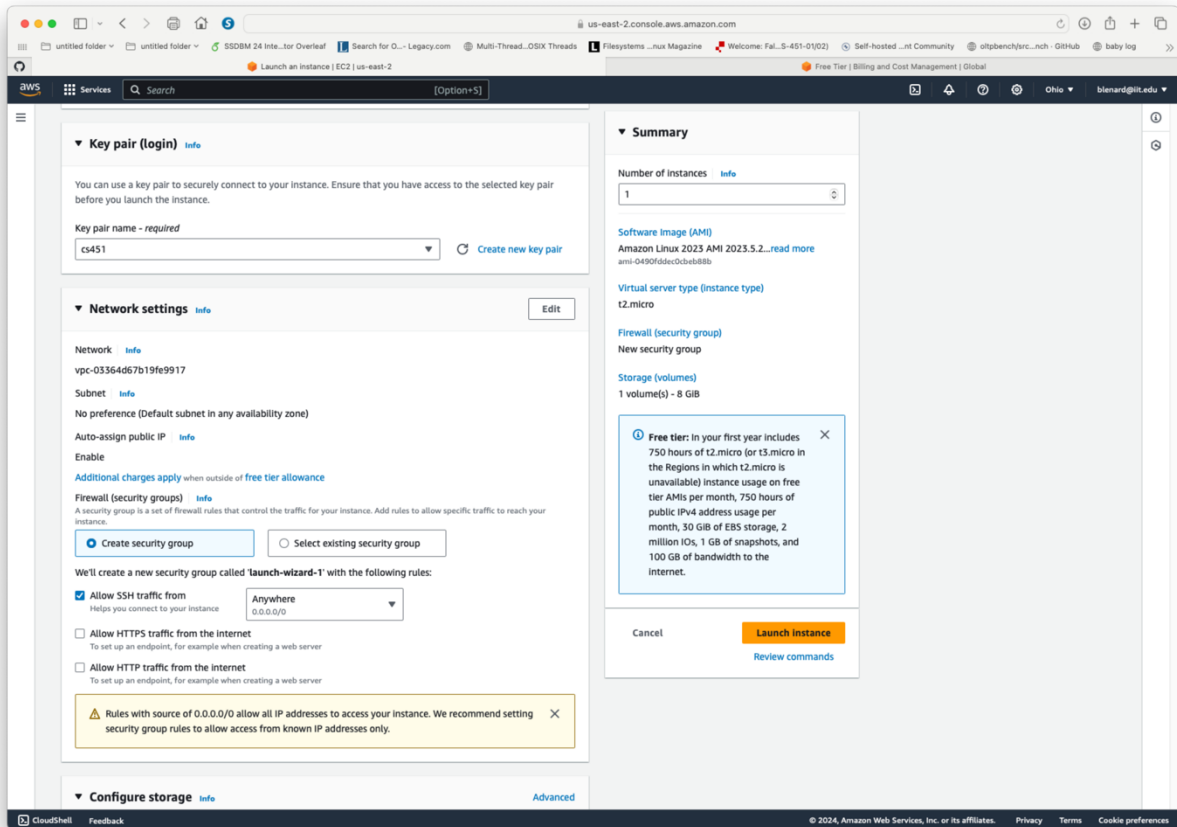d. Click Launch Instance and you should see
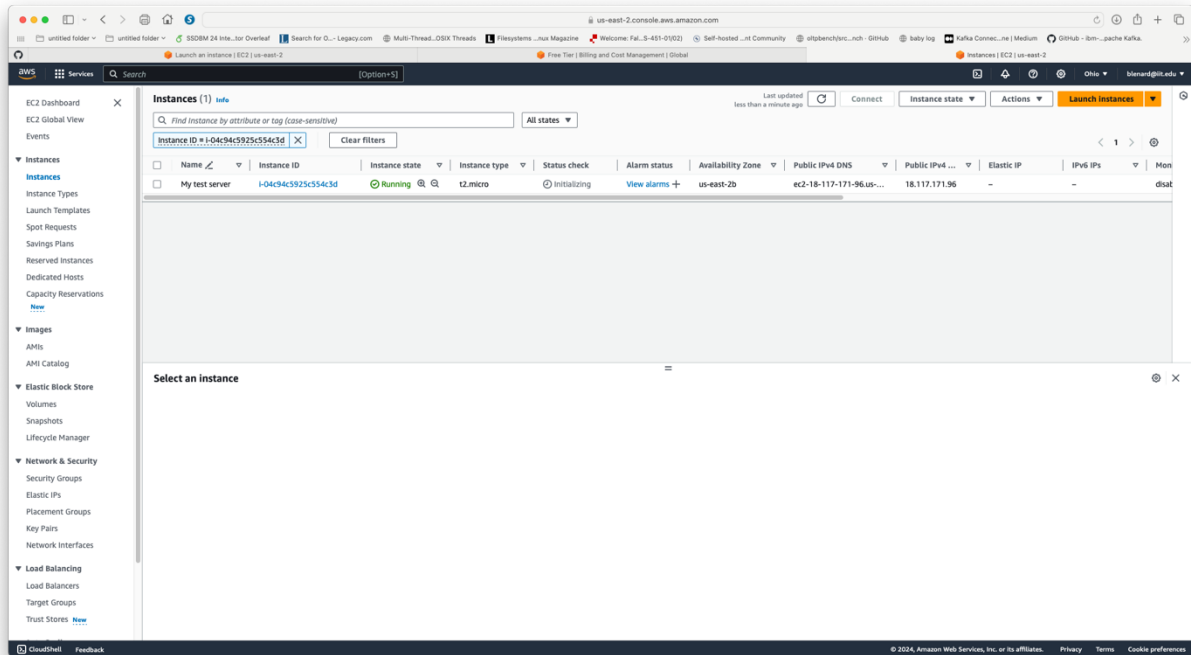
e. It should look like this:

And you will likely need to generate a new RSA key pair so you can login. It will download a PEM file. Make sure you allow 0.0.0.0/0 traffic or your IP address so you can

login. Also for the storage, take the default 8gb . After you did all this, click Launch Instance at the bottom Right.

4) Login.
   a. Copy the IPv4 address and open the shell or Putty

b. Type or enter – note your PEM file might be different:
  i. ssh -i Downloads/cs451.pem ec2-user@18.117.171.96
  ii. enter 'sudo -i' as seen below
  iii. You'll see this

c. Install Java by entering 'yum -y install java g++ gcc php-cli php-xml php-json'
d. Next down load a test suite 'wget https://github.com/phoronix-test-suite/phoronix-test-suite/archive/refs/heads/master.zip'

e. Unzip the file 'unzip master.zip'
f. cd phoronix-test-suite-master/ ; ./install-sh
g. Run this command '/usr/bin/phoronix-test-suite install osbench'
h. Run the benchmark command '/usr/bin/phoronix-test-suite run osbench' and see the options below

i. Notice the results, were there functionating? Why?

5) Write and compile a simple C/C++ that displays the time of the system. Take a screen shot of the compile and run
6) Shutdown the vm and delete it. Always shutdown the VM when not in use.
   a. Execute this: 'shutdown -h +0'
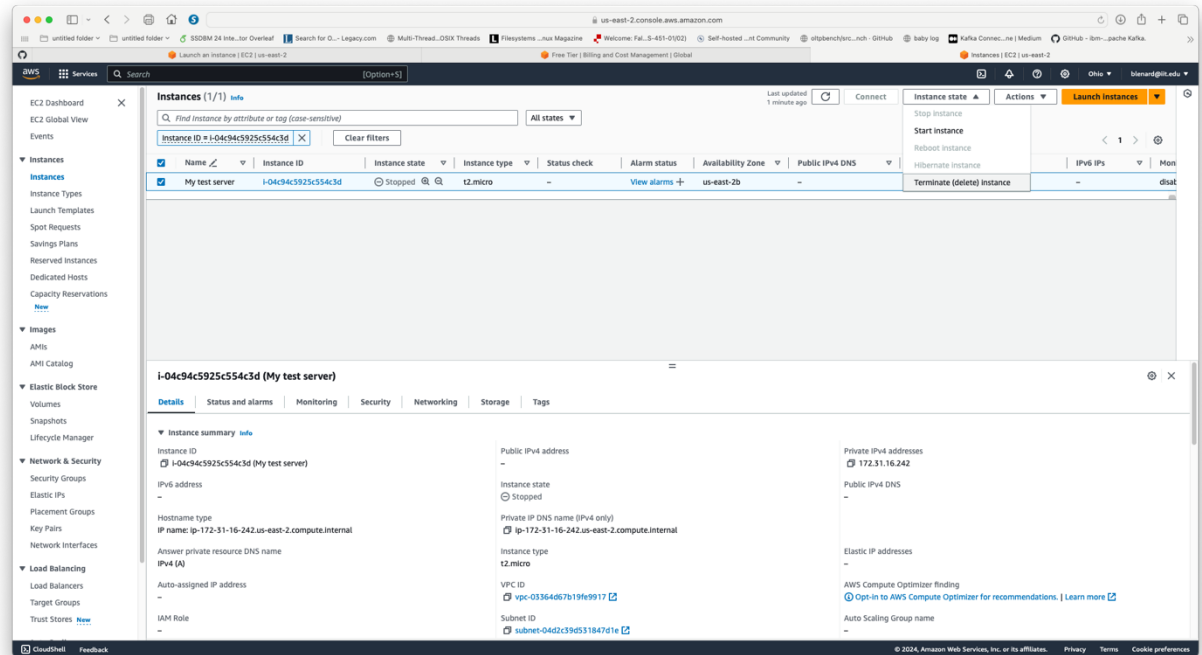
Then it'll show terminated
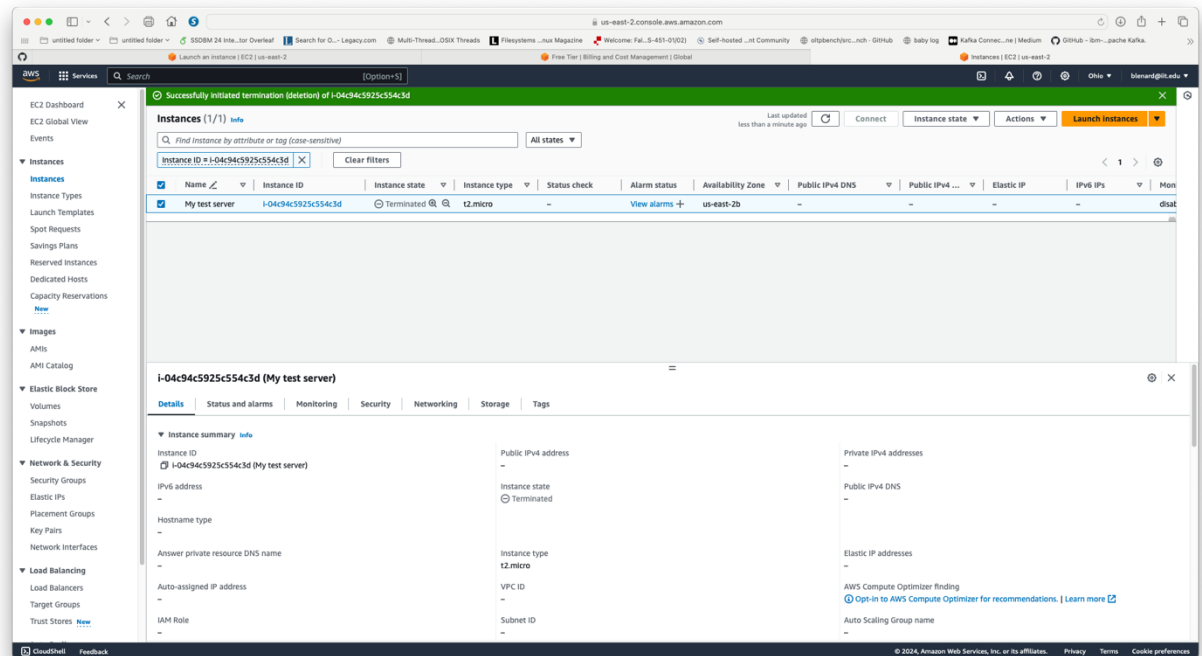
Part2:

In your words, what did we do today in this assignment? What IP address was the VM assigned? What did sudo do? What did yum do? Was deploying the vm easier to deploy

then installing an OS on a physical machine? What was the purpose of the SSH key you generated? Why do you think you got a random IP address? What did the test suite do?