

Instructions for Deployment of the server:

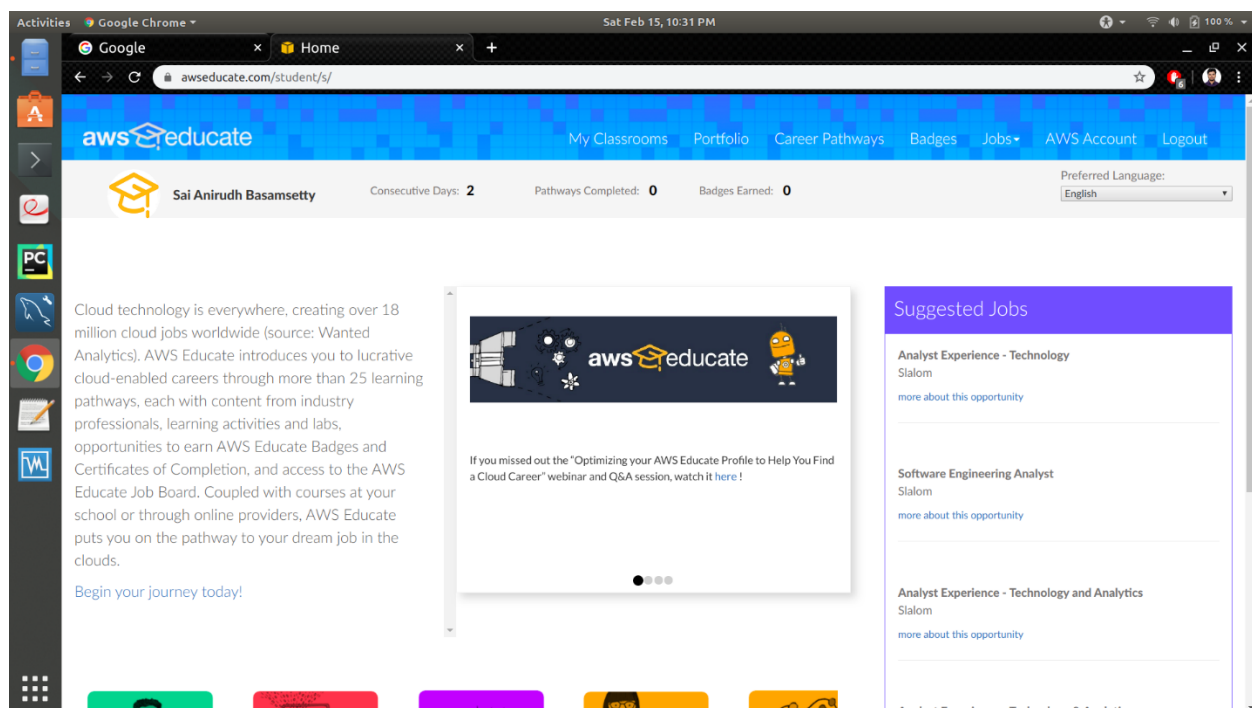
Log in information for the amazon AWS account:

The aws educate account that was provided by the professor was used.  
The credentials to access the account is as follows:

Username: [anirudh.basamsetty@mail.utoronto.ca](mailto:anirudh.basamsetty@mail.utoronto.ca)

Password: Ece1779\_pass

Upon successful login you will be directed to a page that looks like the following image.

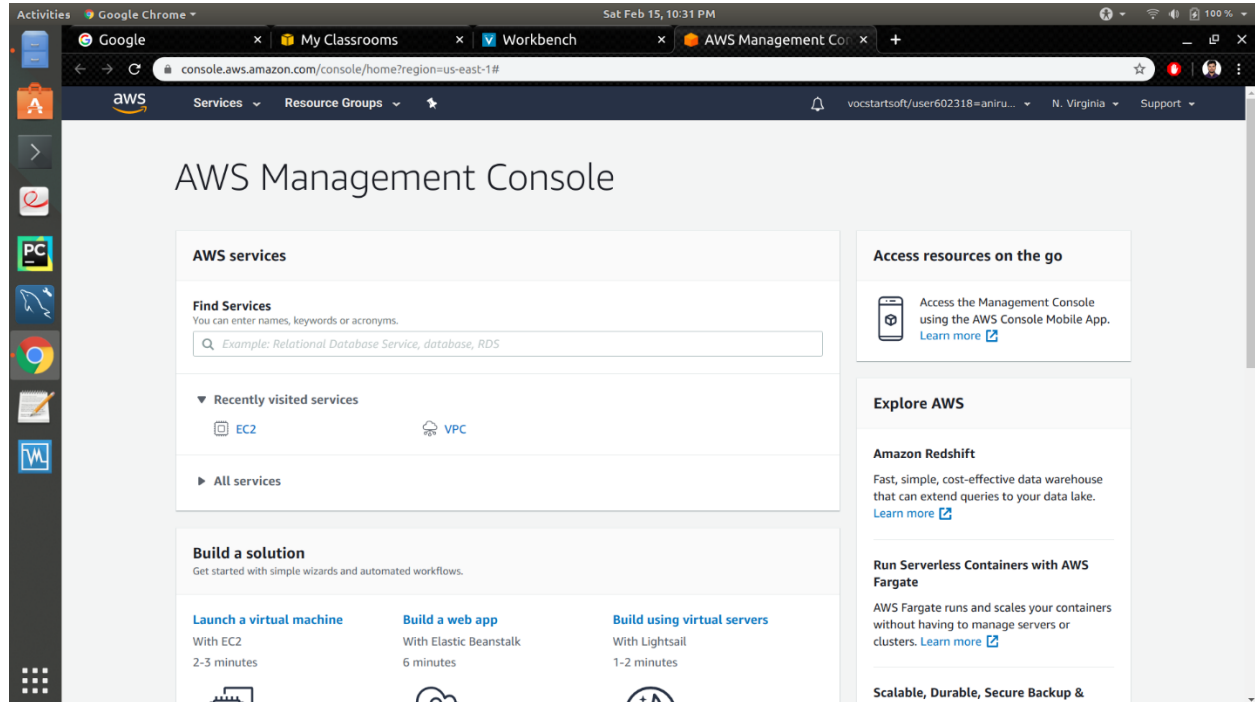


Initiating the instance:

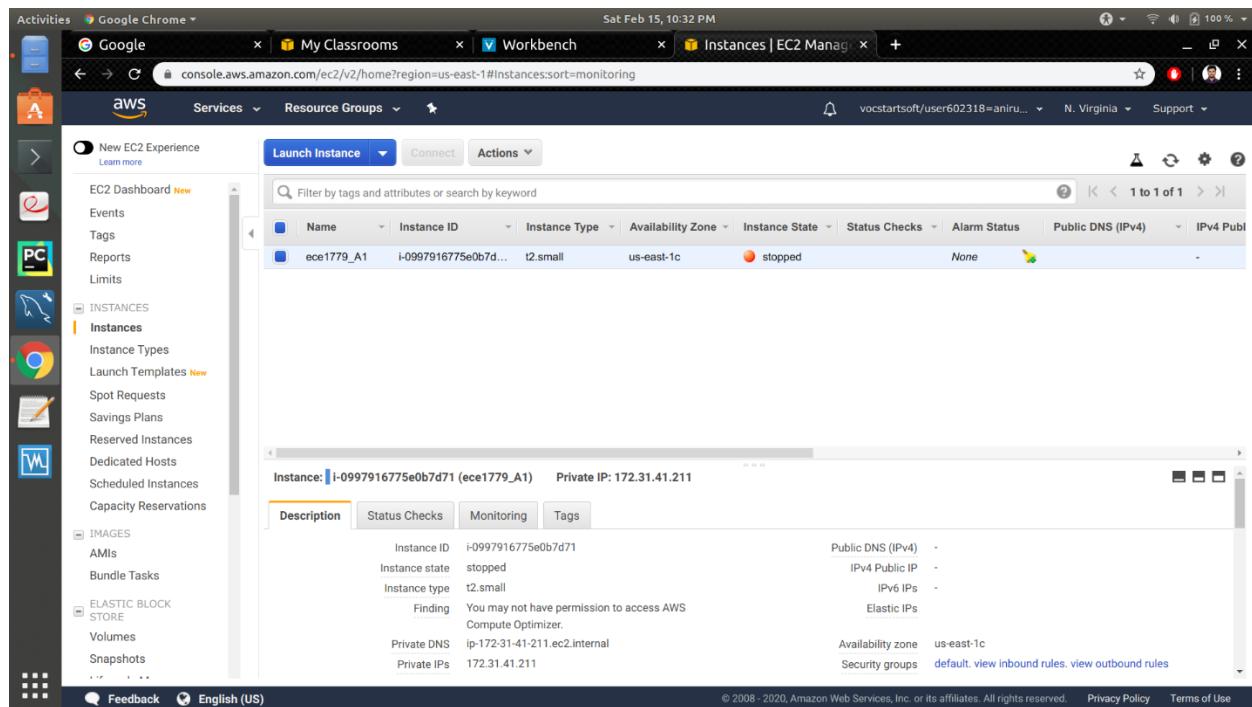
After the log in, the instance can be viewed by going to the link below:

<https://console.aws.amazon.com/console/home?region=us-east-1#>

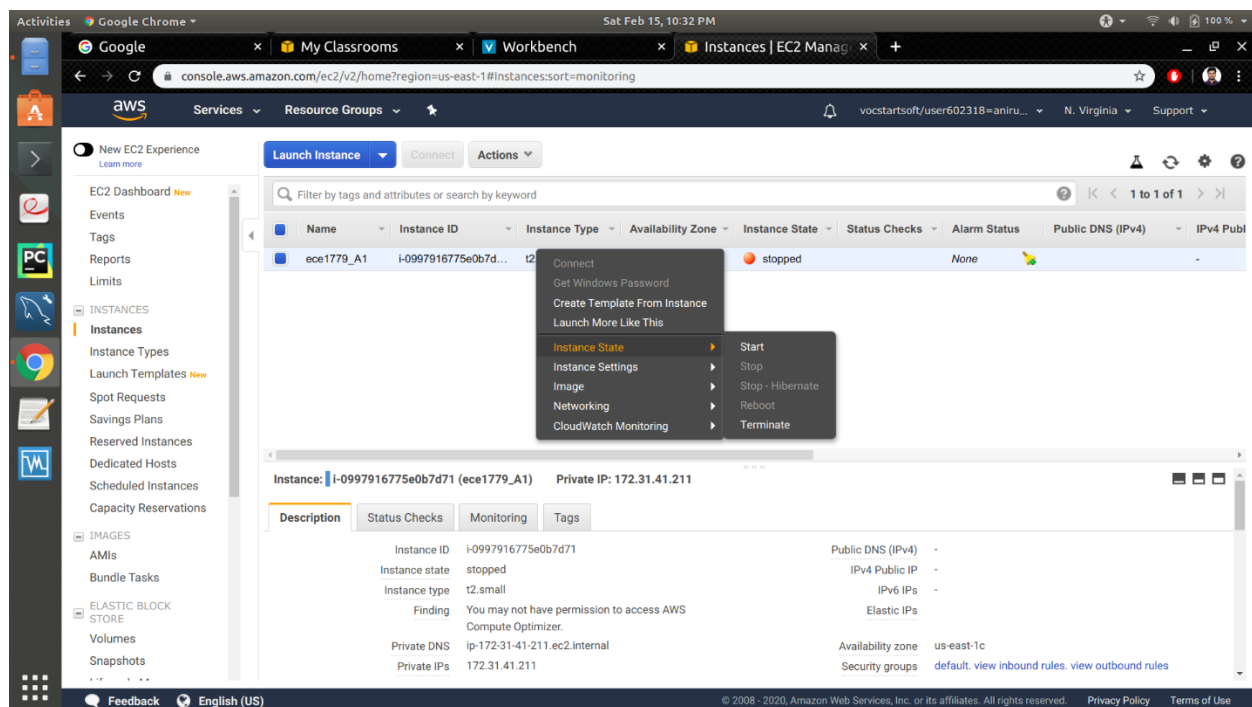
This should direct to a page as shown below:



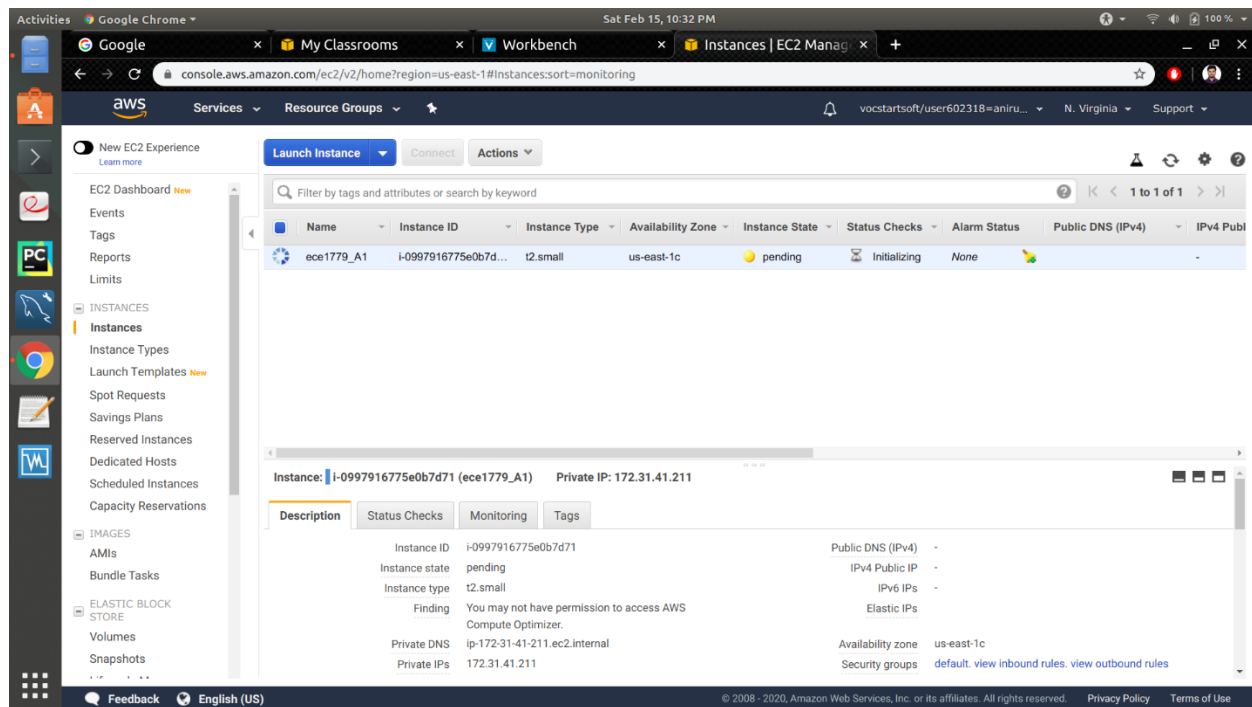
From this page, clicking on EC2 under the “Recently visited services” will direct the page to the EC2 dashboard. Here select the “Instances” option under the “INSTANCES” located on the toolbar on the left side of the page. Selecting this brings up the instances state page.



To activate the instance, right-click on the selected instance, hover over the option “Instance state” and select start. It takes around two minutes for the instance to start running.



While the instance initializes, the following page will be displayed:



After successful activation of the instance, “IPv4 Public IP” field will get IP values assigned to it. This IP values will be used later so noting this down is recommended.

### Running the code:

- Open the terminal in your system
- Use the following commands to ssh into the instance:
  - `ssh -i ece1779_A1.pem ubuntu@the-Public-IP-from-the-instance-page -L 5901:localhost:5901` (in this case: `ssh -i ece1779_A1.pem ubuntu@3.81.187.2 -L 5901:localhost:5901`)
  - write “yes” when asked the question “Are you sure you want to continue connecting?”

the ece1779\_A1.pem is the keypair that is necessary in order to connect to the instance. Pathing of the keypair may change depending on the PC environment being used.
- Following the command steps mentioned above will take you into the instance system.

```
Activities Terminal Sat Feb 15, 10:33 PM
anirudh@anirudh: ~
File Edit View Search Terminal Help
(base) anirudh@anirudh:~$ ssh -i ece1779_A1.pem ubuntu@3.81.187.2 -L 5901:localhost:5901
The authenticity of host '3.81.187.2 (3.81.187.2)' can't be established.
ECDSA key fingerprint is SHA256:kY2a13Jq8oFLSAVtHV702diDKGTHq/G1sYtcfX3kZ88.
Are you sure you want to continue connecting (yes/no)?
```

```
Activities Terminal Sat Feb 15, 10:33 PM
ubuntu@ip-172-31-41-211: ~
File Edit View Search Terminal Help
(base) anirudh@anirudh:~$ ssh -i ece1779_A1.pem ubuntu@3.81.187.2 -L 5901:localhost:5901
The authenticity of host '3.81.187.2 (3.81.187.2)' can't be established.
ECDSA key fingerprint is SHA256:kY2a13Jq8oFLSAVtHV702diDKGTHq/G1sYtcfX3kZ88.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '3.81.187.2' (ECDSA) to the list of known hosts.
Welcome to Ubuntu 16.04.6 LTS (GNU/Linux 4.4.0-173-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

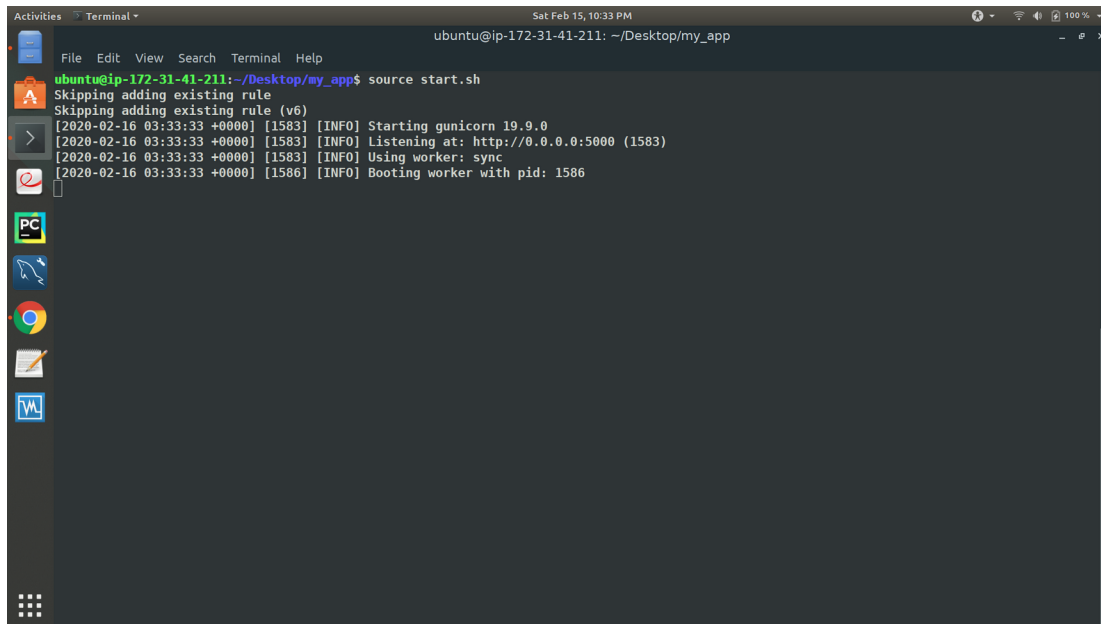
Get cloud support with Ubuntu Advantage Cloud Guest:
http://www.ubuntu.com/business/services/cloud

21 packages can be updated.
1 update is a security update.

New release '18.04.4 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Last login: Sat Feb 15 22:28:59 2020 from 99.238.233.3
ubuntu@ip-172-31-41-211:~$
```

- From here to turn on the application, type the following in the terminal of your machine: (Use python3)
  - `cd ./Desktop/my_app`
  - `source start.sh`



```
Activities Terminal Sat Feb 15, 10:33 PM
ubuntu@ip-172-31-41-211: ~/Desktop/my_app
ubuntu@ip-172-31-41-211:~/Desktop/my_app$ source start.sh
Skipping adding existing rule
Skipping adding existing rule (v6)
[2020-02-16 03:33:33 +0000] [1583] [INFO] Starting gunicorn 19.9.0
[2020-02-16 03:33:33 +0000] [1583] [INFO] Listening at: http://0.0.0.0:5000 (1583)
[2020-02-16 03:33:33 +0000] [1583] [INFO] Using worker: sync
[2020-02-16 03:33:33 +0000] [1586] [INFO] Booting worker with pid: 1586
```

This will successfully launch the web application with the local host: 0.0.0.0:5000 which you can visit using your web browser. The website is now fully deployed with the address **the-Public-IP-from-the-instance-page:5000** (which in this case is 3.81.187.2:5000)