Launching an EC2 Instance

Launch the EC2 instance on AWS and access Amazon's EC2 server from your local machine using Windows or Linux/Mac OS. Here's the link to AWS EC2:

1. To access the AWS platform, make sure that you have the login credentials. Click to Jump to console tab.
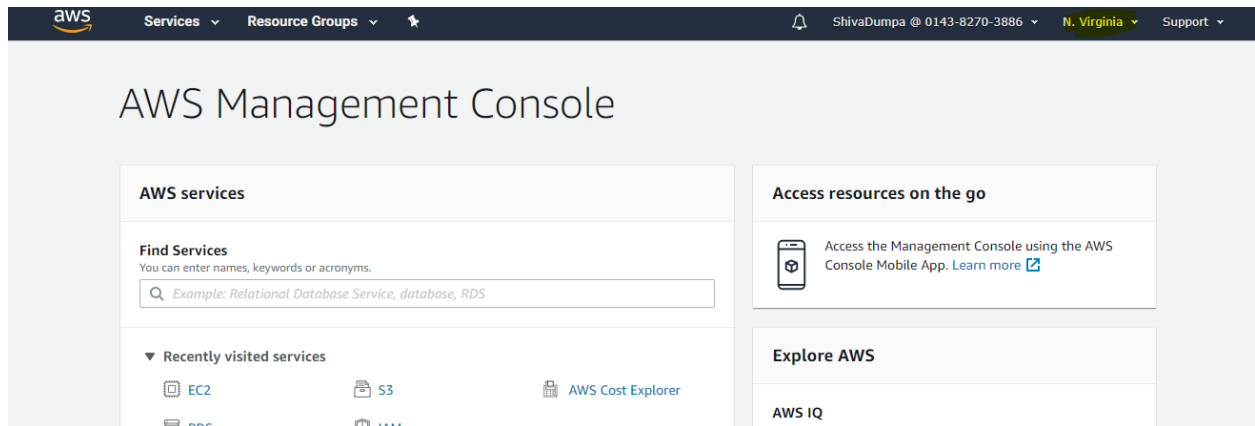
2. After signing in, select region **N.Virginia**. from the drop-down menu at the top-right corner.
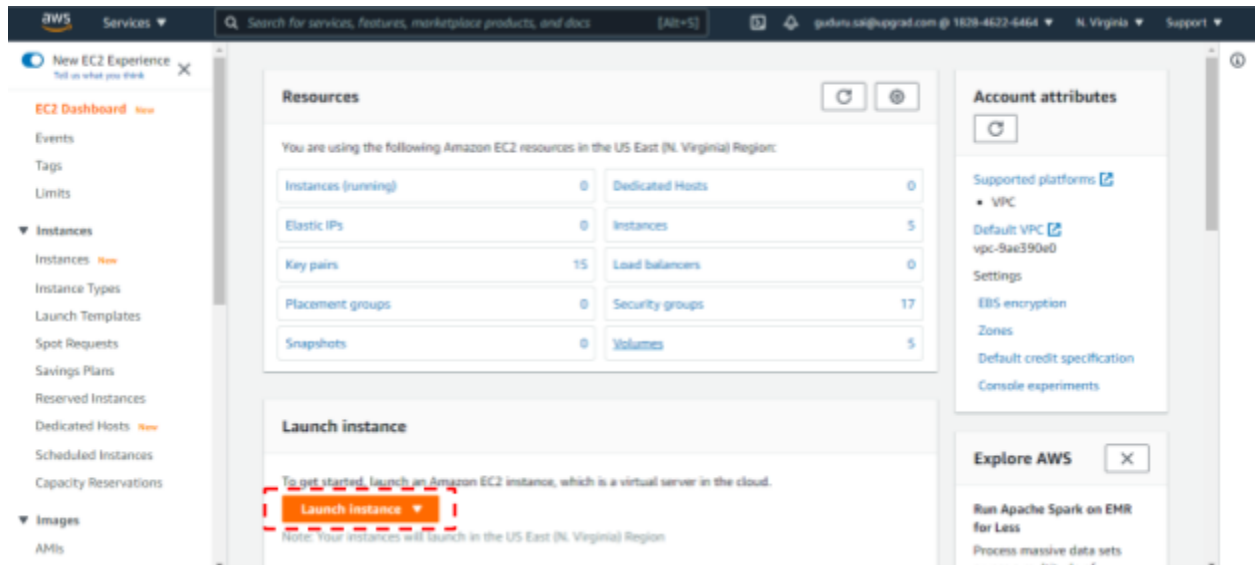

3. **Click** on **EC2** that is shown below the 'Services' under 'Find services'.
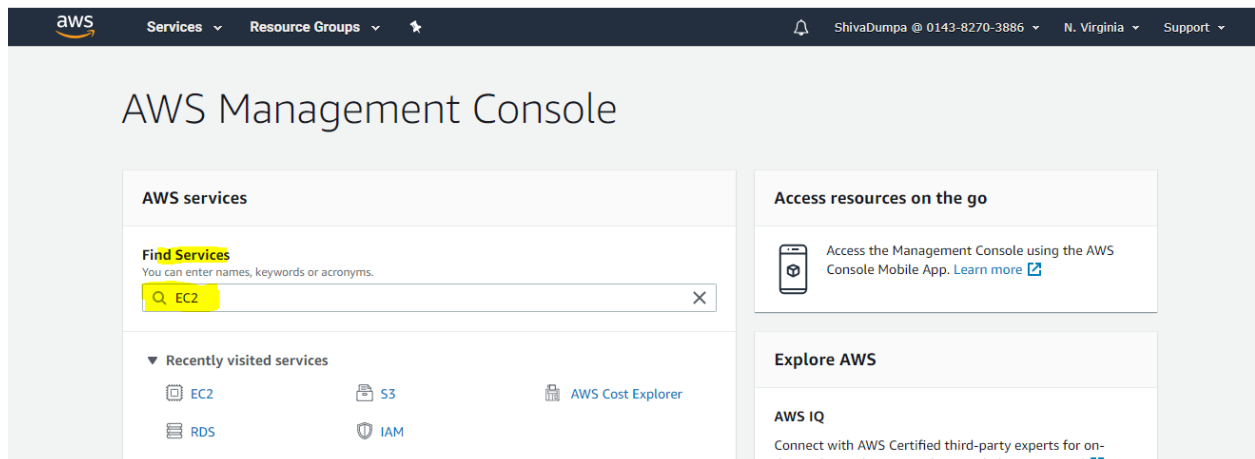
4. Then, click on 'Launch Instance' as shown below.

5. In the '**Step 1: Choose an Amazon Machine Image'** page, select the **OS** (operating system) you want to install in the instance**.** In this module, we are selecting **"Ubuntu Server 18.04 LTS (HVM), SSD Volume Type"** and **clicking** on Select.

(**Note, in future modules, you will be working with Amazon Linux.)**
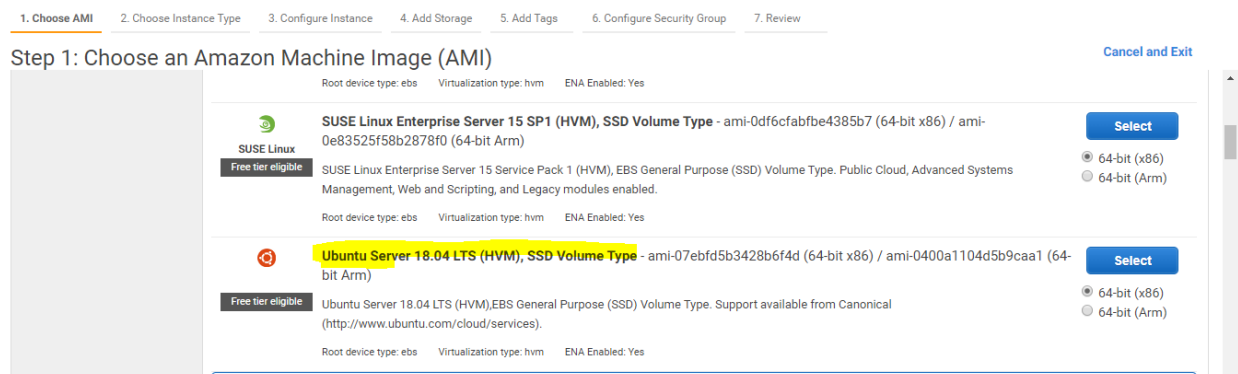
6. Next, select the type of machine or the configuration that you need. We recommend you to select a machine with **1 core** (CPUs) and **1 GB memory** — t2.micro .

7. Click on 'Next: Configure Instance Details'.
   a. Set the 'Number of instances' to 1.
   b. 'Network' to your VPC name.-default
   c. Auto-assign Public IP- **Enable**

   Keep all other settings unchanged.

8. Now, click on '**Next: Add Storage**'.

9. Click on '**Next: Add Tags**'. Then Click on '**click to add a Name tag**' as shown in the image below.

a. Give a name in the cell under '**Value**'. In our case, we have named the instance as 'Ubuntu'.

10. Click on '**Next: Configure Security Group**'.

Select the option '**Create a new security group**' and name it as '**ml-sec**'. You should select the source as **My IP** for best practice. It automatically puts your system IP address in the section.

Note: You can also verify your source ip address or your system ip address using the below link.

https://www.ip2location.com/

You have to be careful when you are using the office laptop or a VPN network. In a few cases, you might not be able to access EC2 instances as your company might have blocked these services. In that case, please use a personal laptop or another network.

Then click on "**Review and launch**"

11. Finally, Click on "**Launch**".

12. After that, select '**Create a new key pair**' give the key pair a name (**Test** in our case), and then click on '**Download Key Pair**'.

Note: You must download the pem file as it can't be accessed again. Also, it gives access to your instance, so please keep it in a safe location and do not share it with anybody.

13. Then, click on '**Launch Instances**'.

Your instance is now ready. Click on '**View Instances**' and your instances will appear on the screen, as shown below:

Check the 'Status Checks' column until '2/2 checks' appears.

However, there are additional steps to access it from your machine. Let's try to understand those.

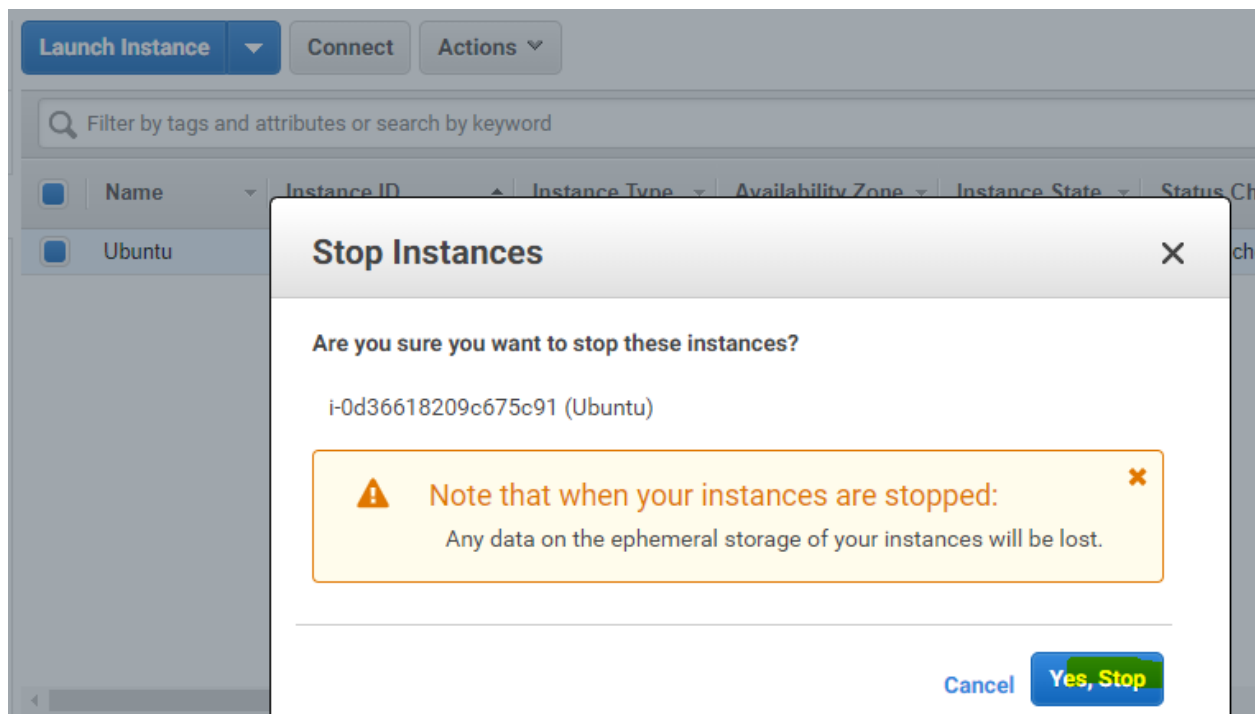**NOTE-:** **After you have created the instance, please stop the t2.micro instance when your work is over. Otherwise, your credits will get deducted. The steps to stop the instance are given below:**

1. Go to your EC2 dashboard and select your ec2 instance then click to "Action" > Instance State > Stop
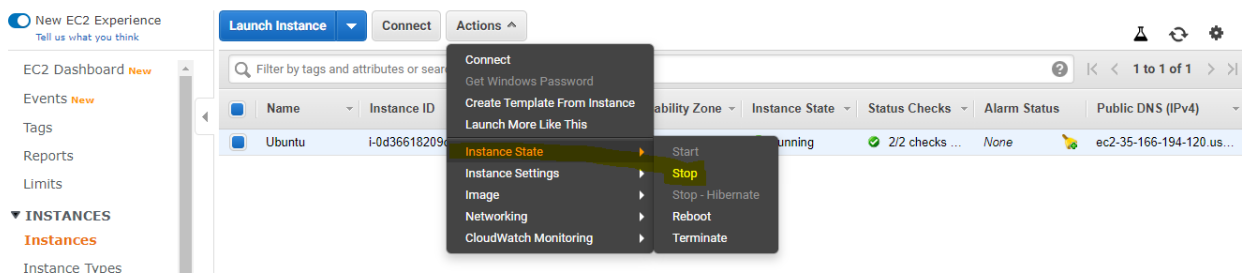
2. Click on **Yes.Stop.**

3. Verify with Instance state.it should be stopped state and colour state is Red.