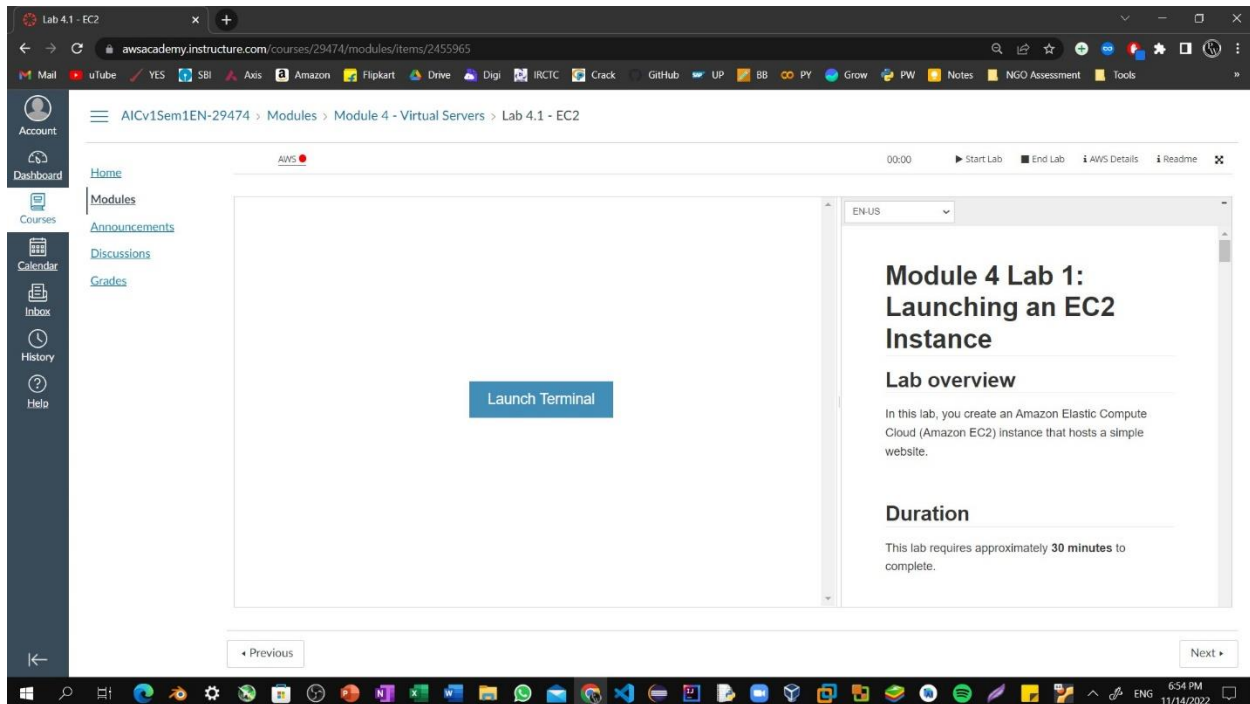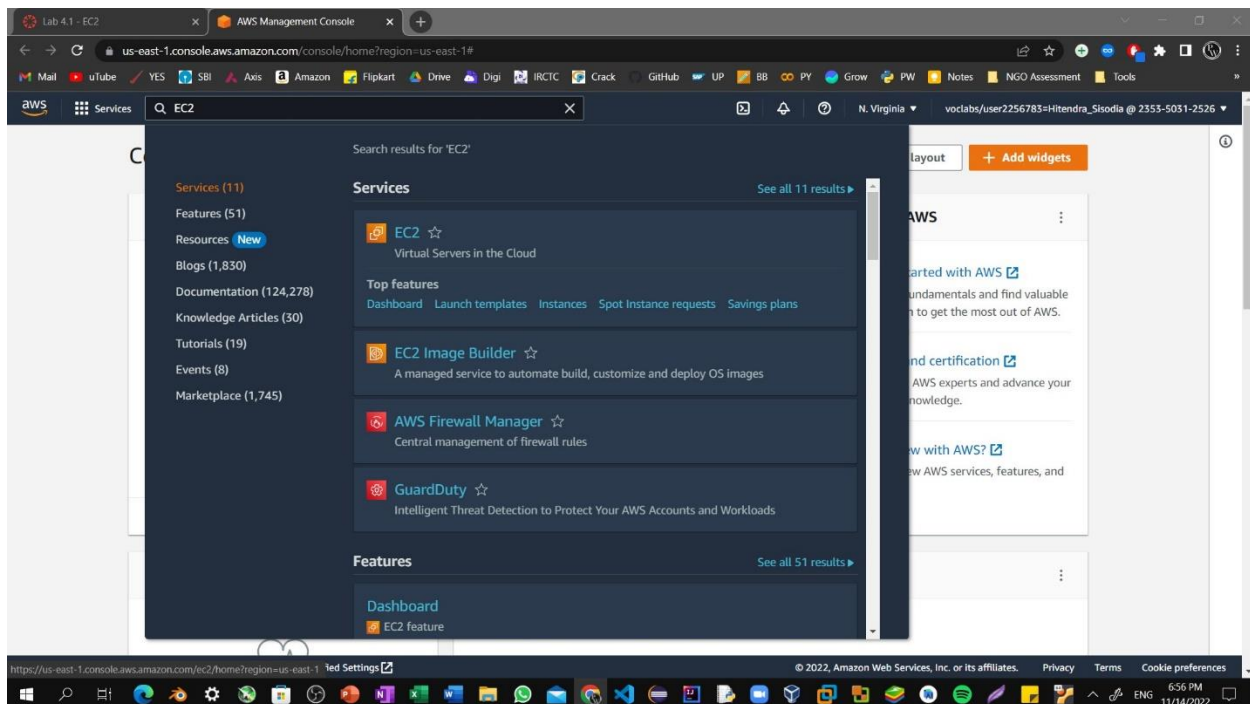Name: Hitendra Sisodia
Sap id: 500091910

Lab 11: Launching an EC2 Instance With EBS Storage

Step1: To start the lab session, choose **Start Lab** in the upper-right corner of the page.
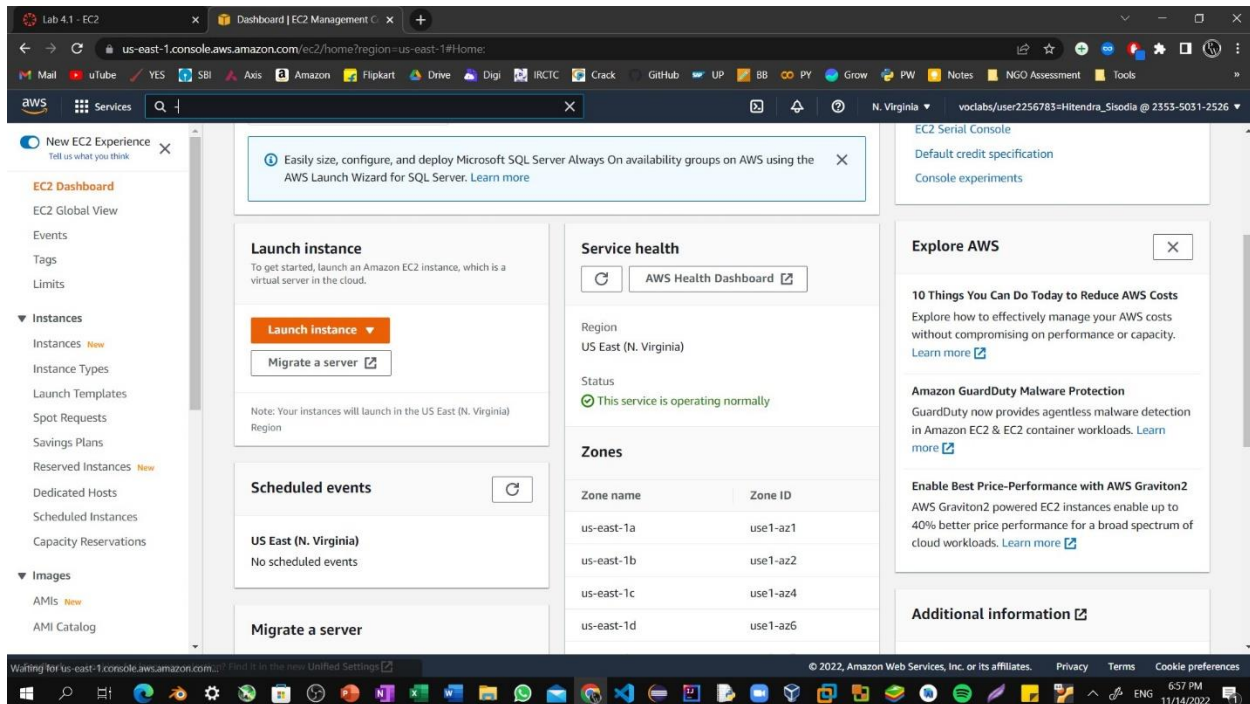

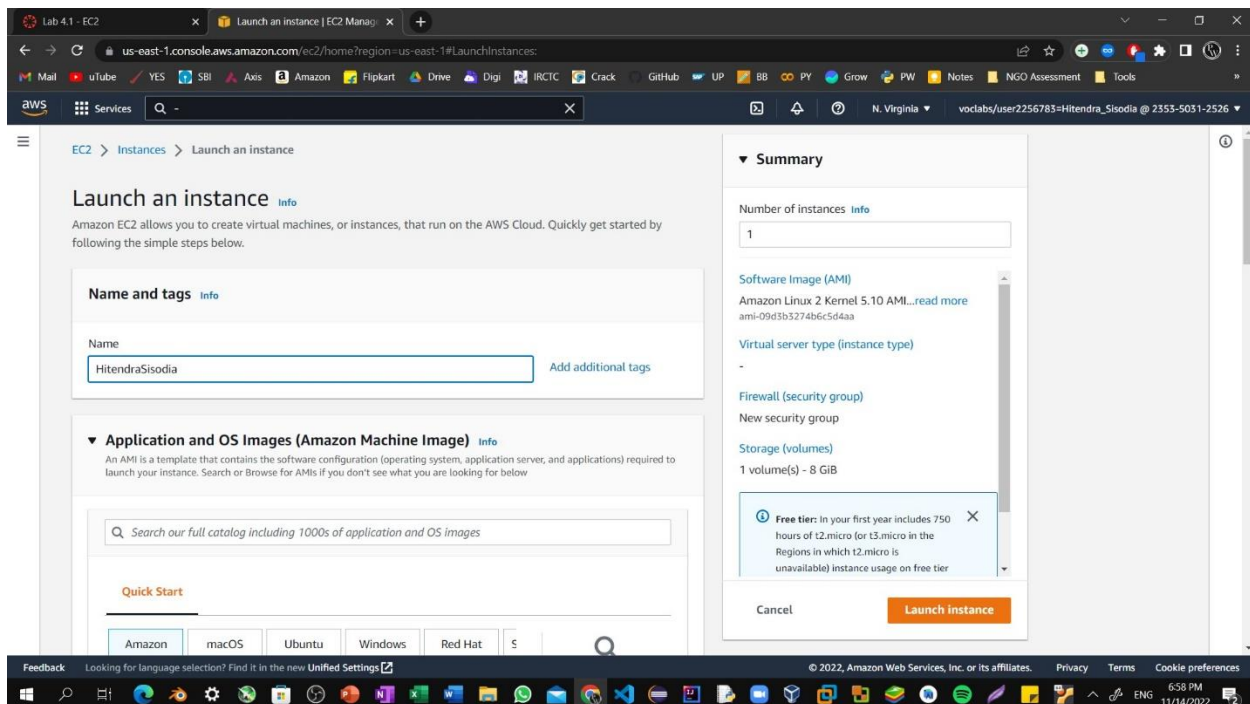**Step2:** Choose the **Services** menu, locate the **Compute** services, and select **EC2.**

Lab 11: Launching an EC2 Instance With EBS Storage

Step3: Choose the **Launch instance** button in the middle of the page, and then select **Launch instance** from the dropdown menu.

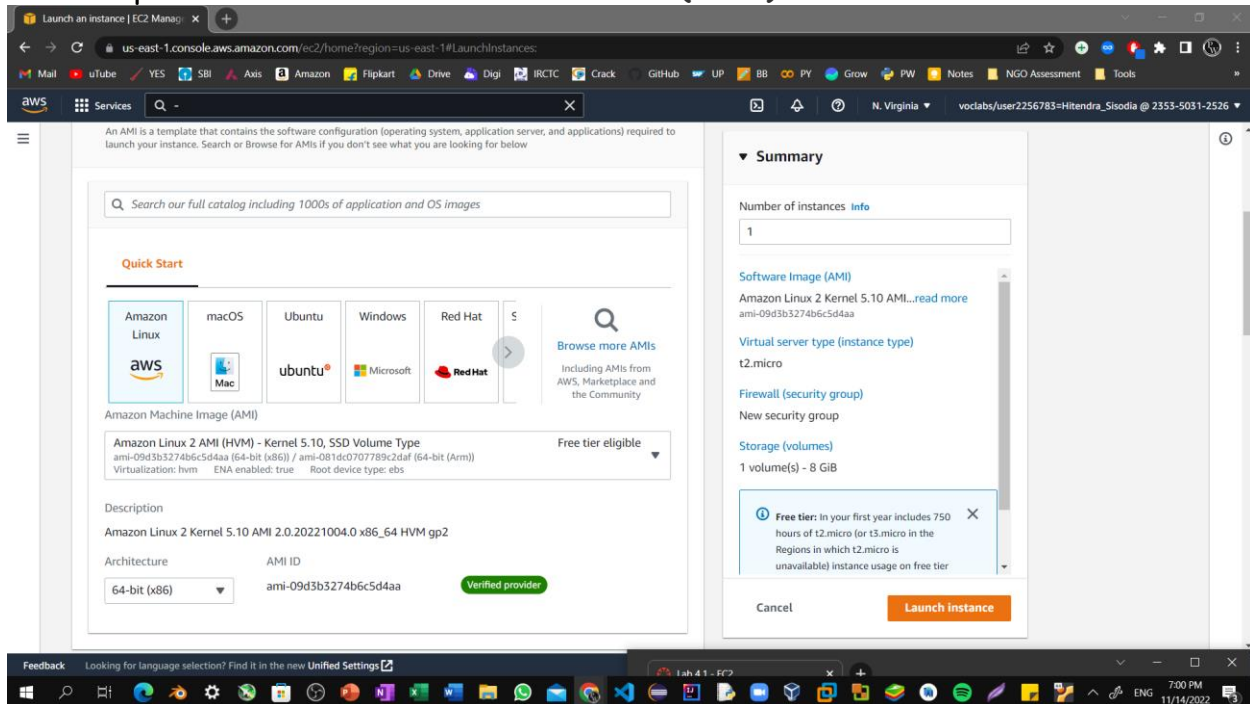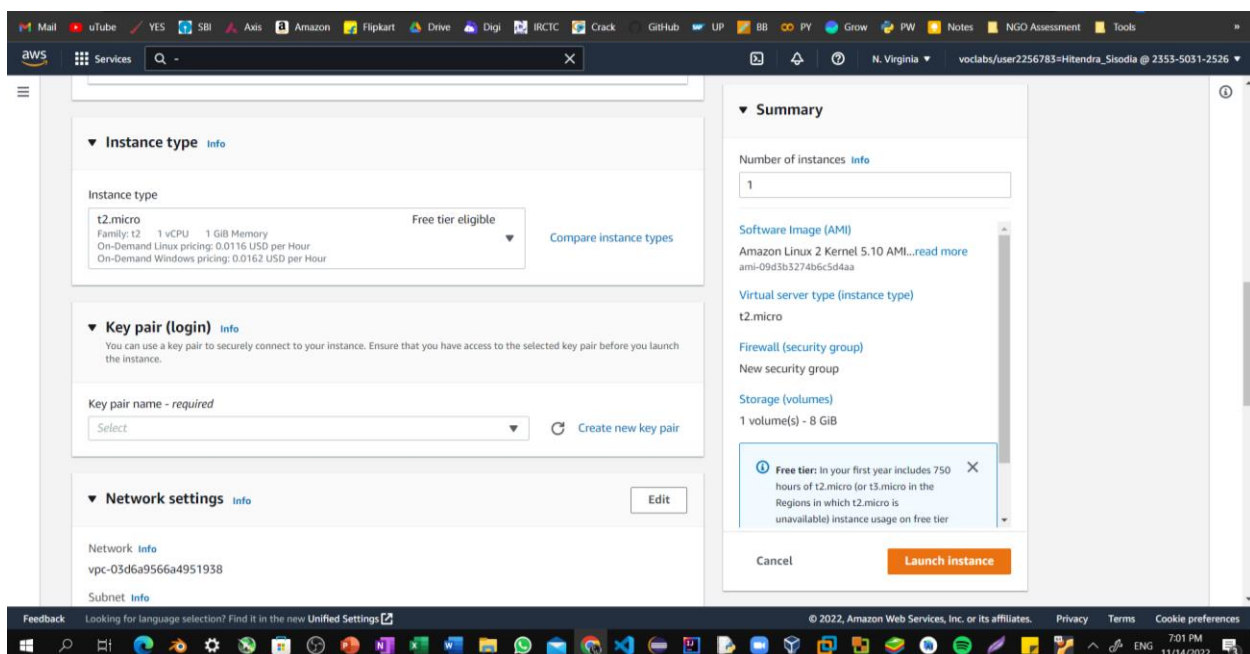**Step4:** Name the instance: HitendraSisodia

Step5: Choose an AMI from which to create the instance:

In the list of available *Quick Start* AMIs, keep the default **Amazon Linux** AMI selected.

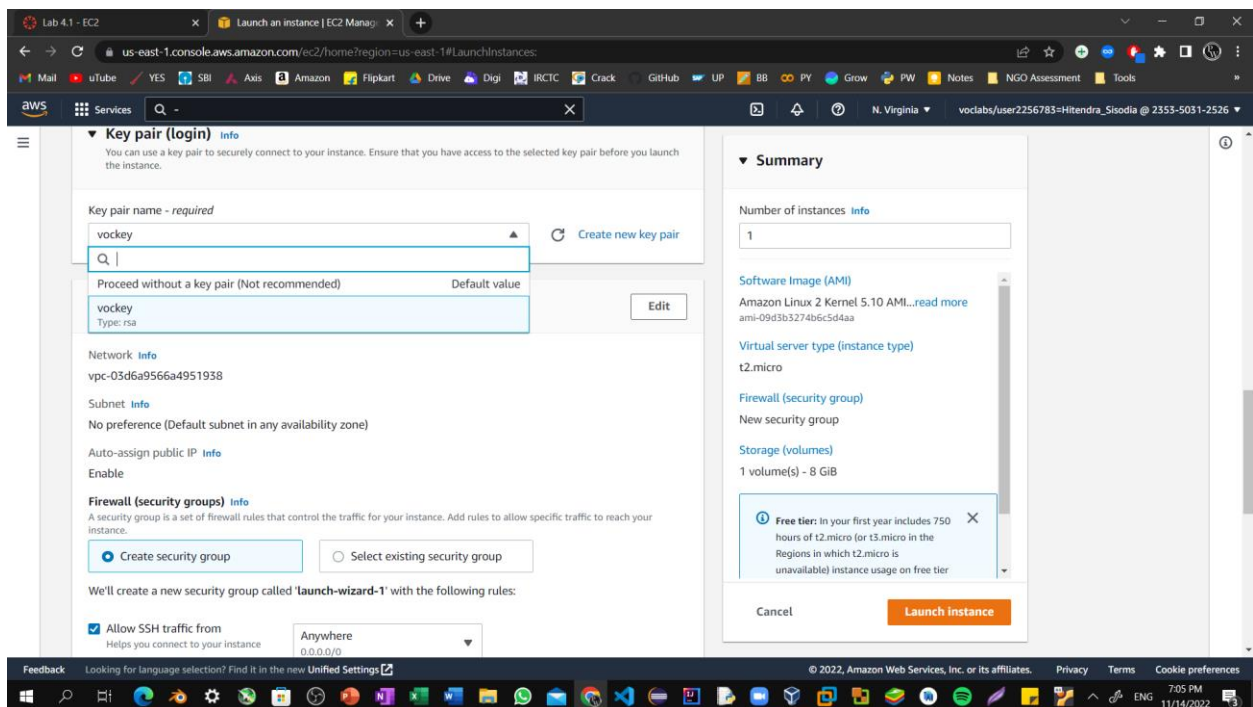Also keep the default **Amazon Linux 2 AMI (HVM)** selected.

Step6: Specify an Instance type: In the *Instance type* panel, keep the default **t2.micro** selected.
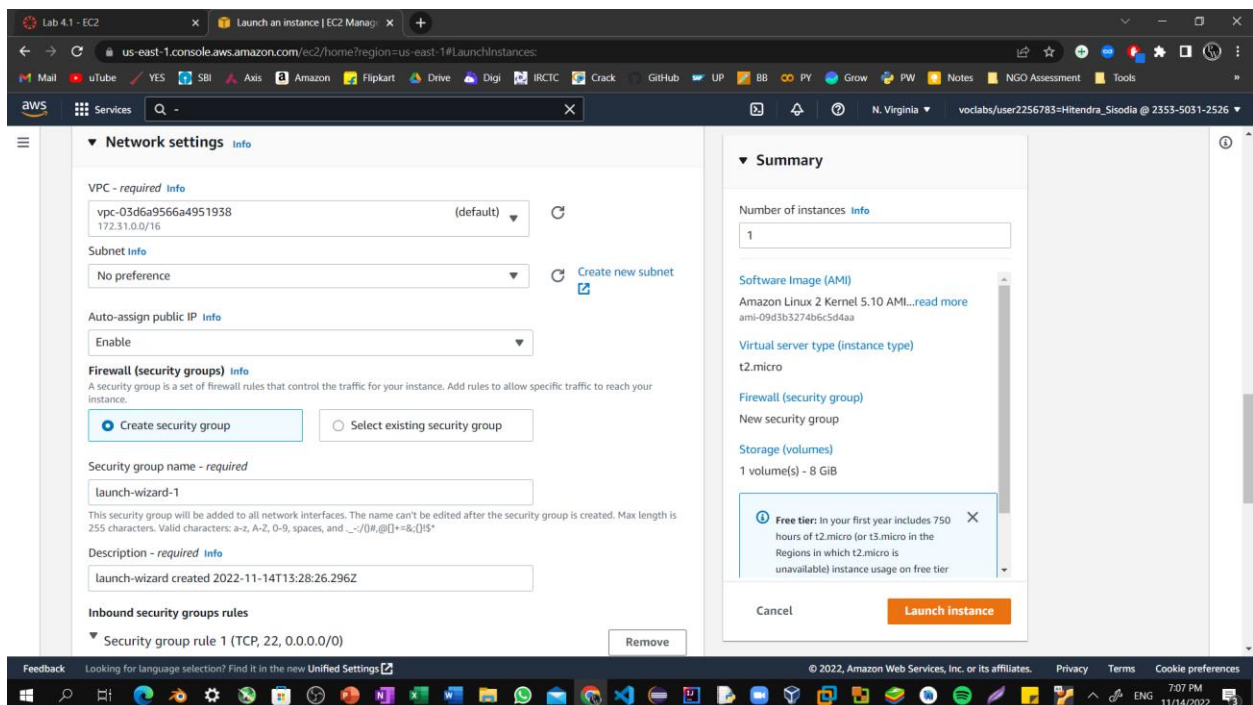
Step7: Select the key pair to associate with the instance. From the **Key pair name** menu, select **vockey**.
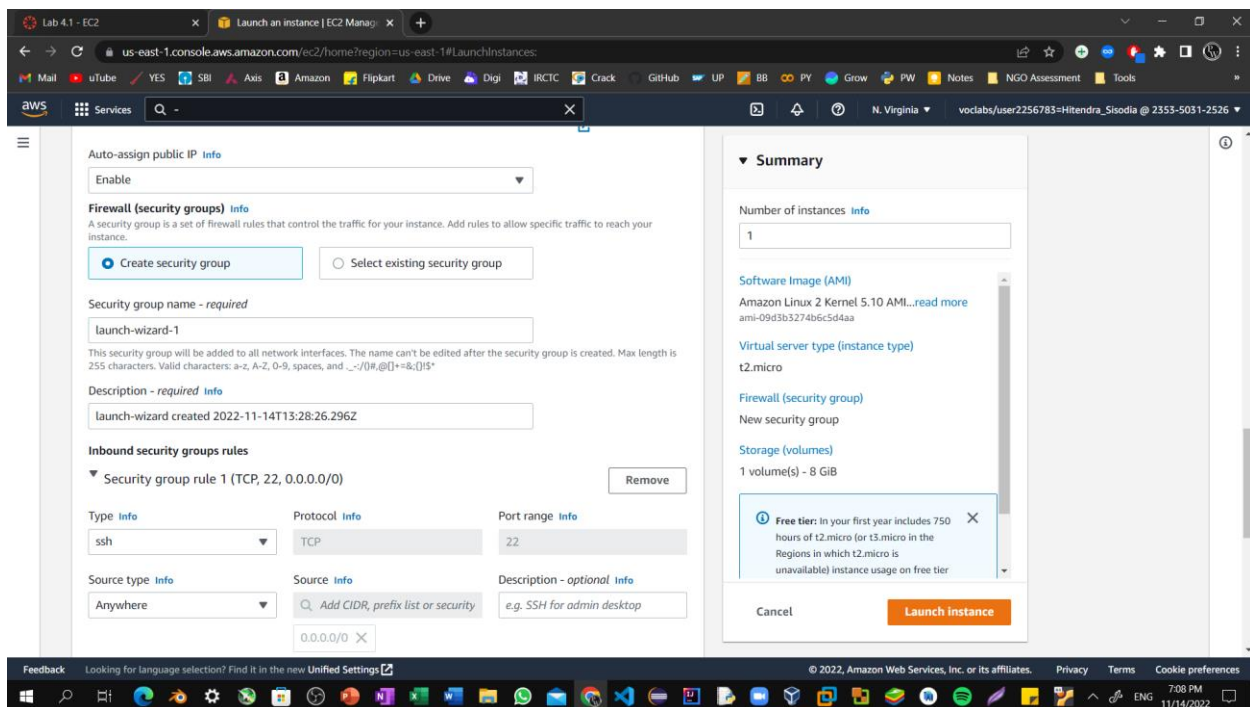

Step8: Next to Network settings, choose **Edit**. Keep the default *VPC* and *subnet* settings. Also keep the **Auto-assign public IP** setting set to **Enable**.
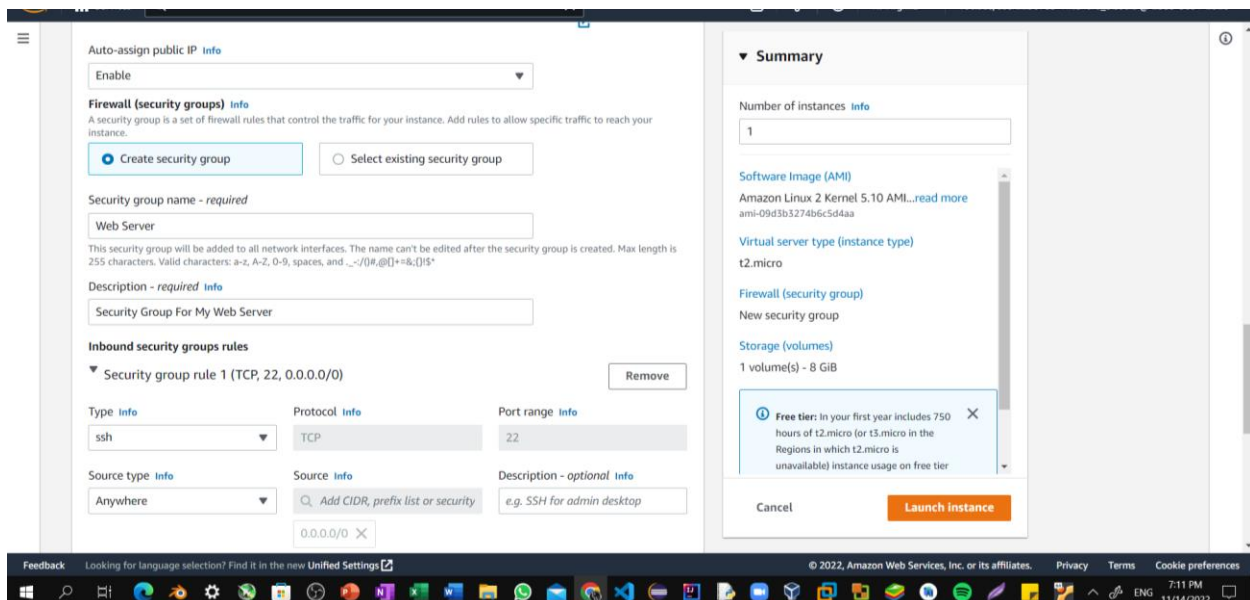
Lab 11: Launching an EC2 Instance With EBS Storage

Step9: Under *Firewall (security groups)*, keep the default **Create security group** option chosen.
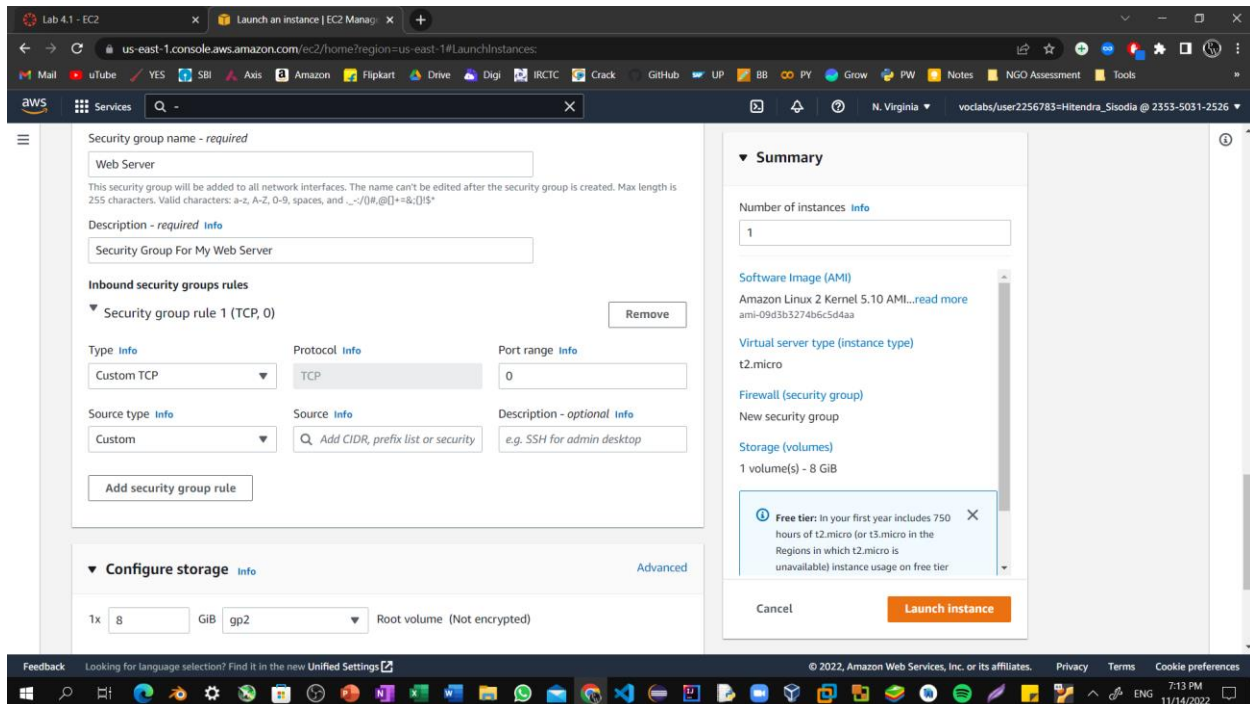

Step10: Configure a new security group:

- Keep the default selection **Create a new security group**.
- **Security group name:** Clear the text and enter Web Server
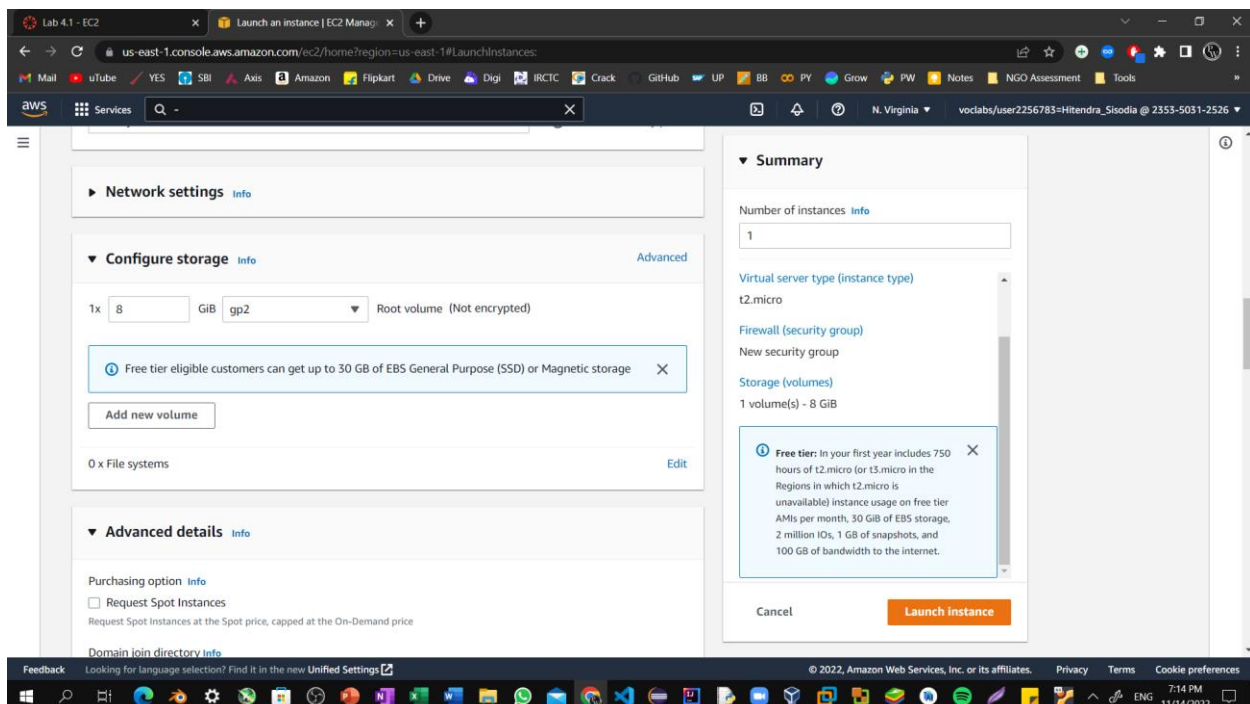- **Description:** Clear the text and enter Security group for my web server

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**Step11:** Choose **Remove** to remove the default SSH inbound rule.

Step12: In the *Configure storage* section, keep the default settings. You will launch the Amazon EC2 instance using a default Elastic Block Store (EBS) disk volume.
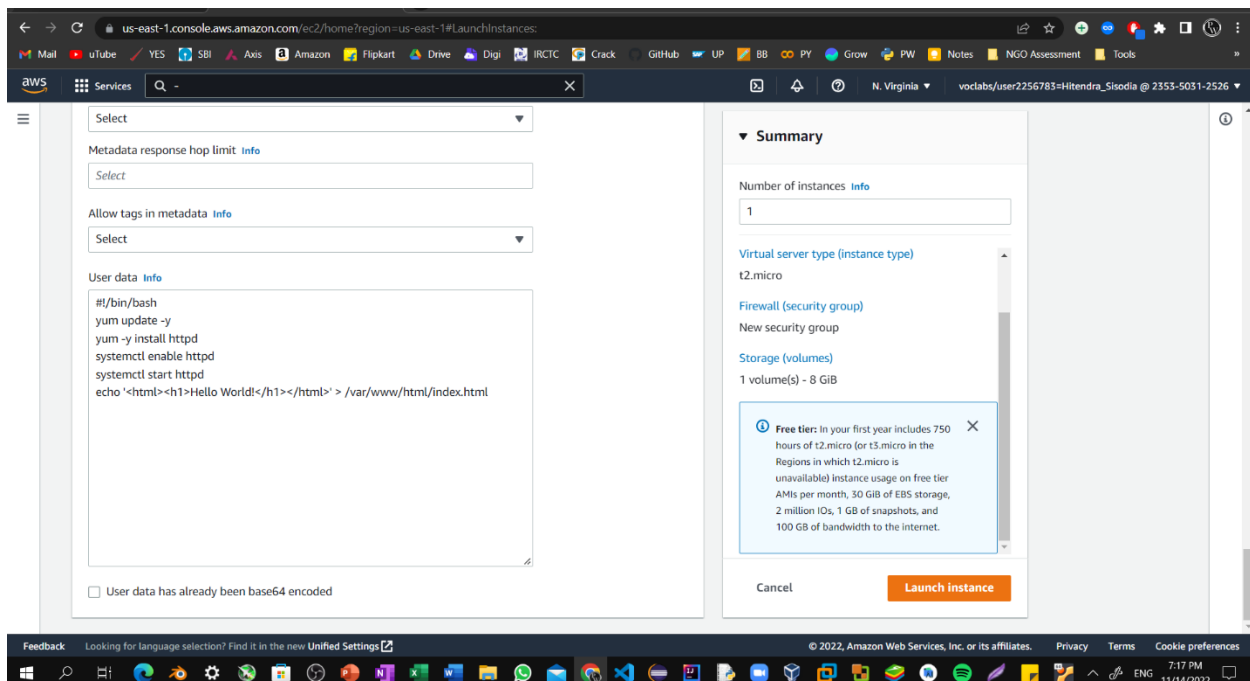
Lab 11: Launching an EC2 Instance With EBS Storage

Step13: Configure a script to run on the instance when it launches:
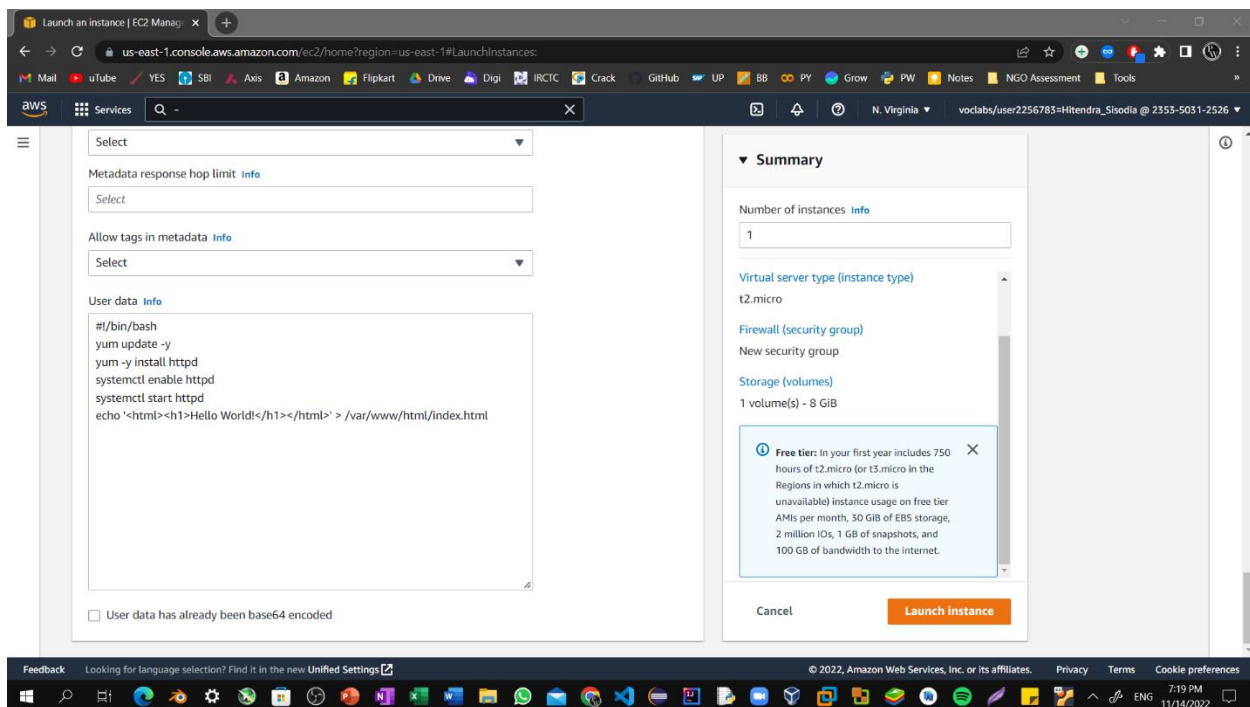
- Expand the **Advanced details** panel.
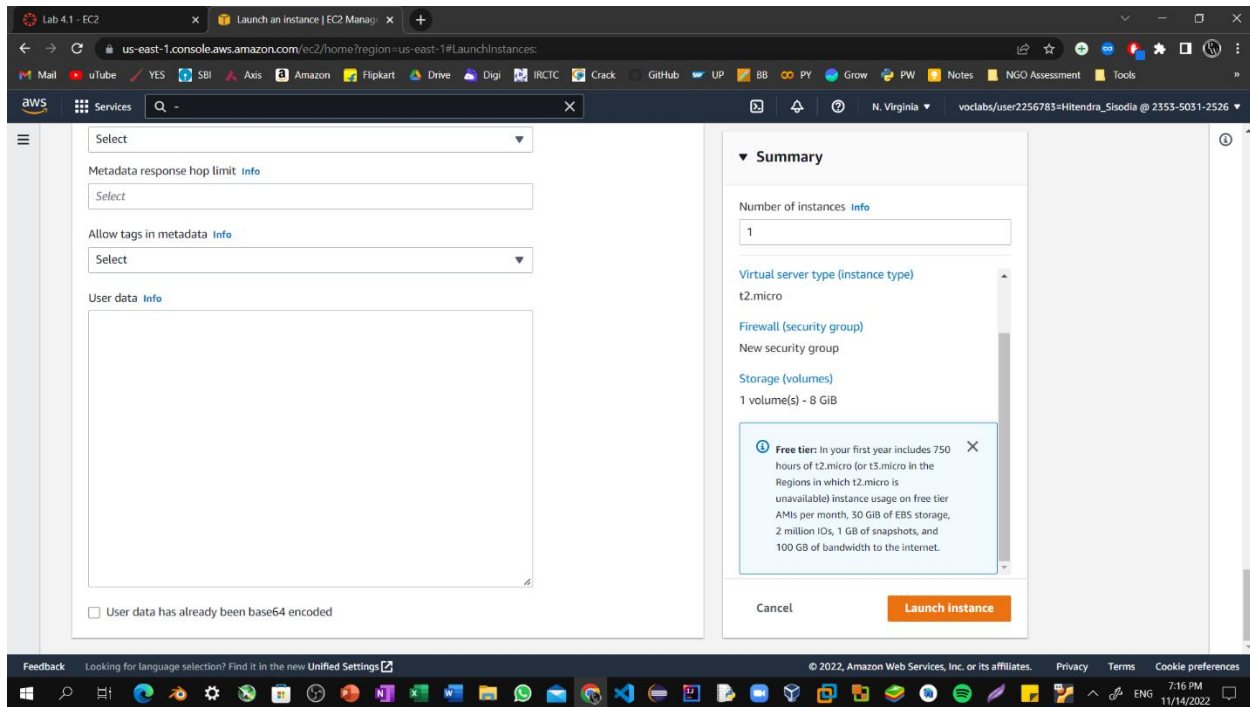
Step14: Scroll to the bottom of the page and then copy and paste the code shown below into the **User data** box.
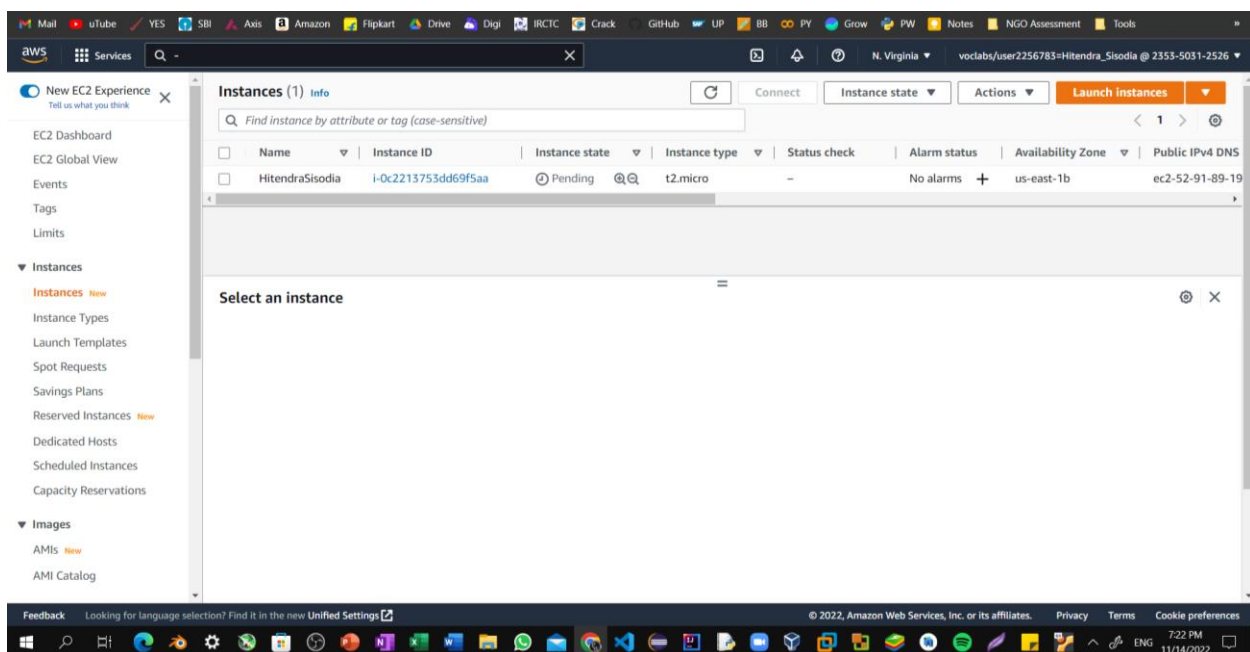
Lab 11: Launching an EC2 Instance With EBS Storage

Step15: At the bottom of the **Summary** panel on the right side of the screen choose Launch Instances. You will see a Success message.

Step16: The instance will first appear in the *Pending* state, which means it is being launched. The state will then change to *Running*, which indicates that the instance has started booting. It takes a few minutes for the instance to boot.
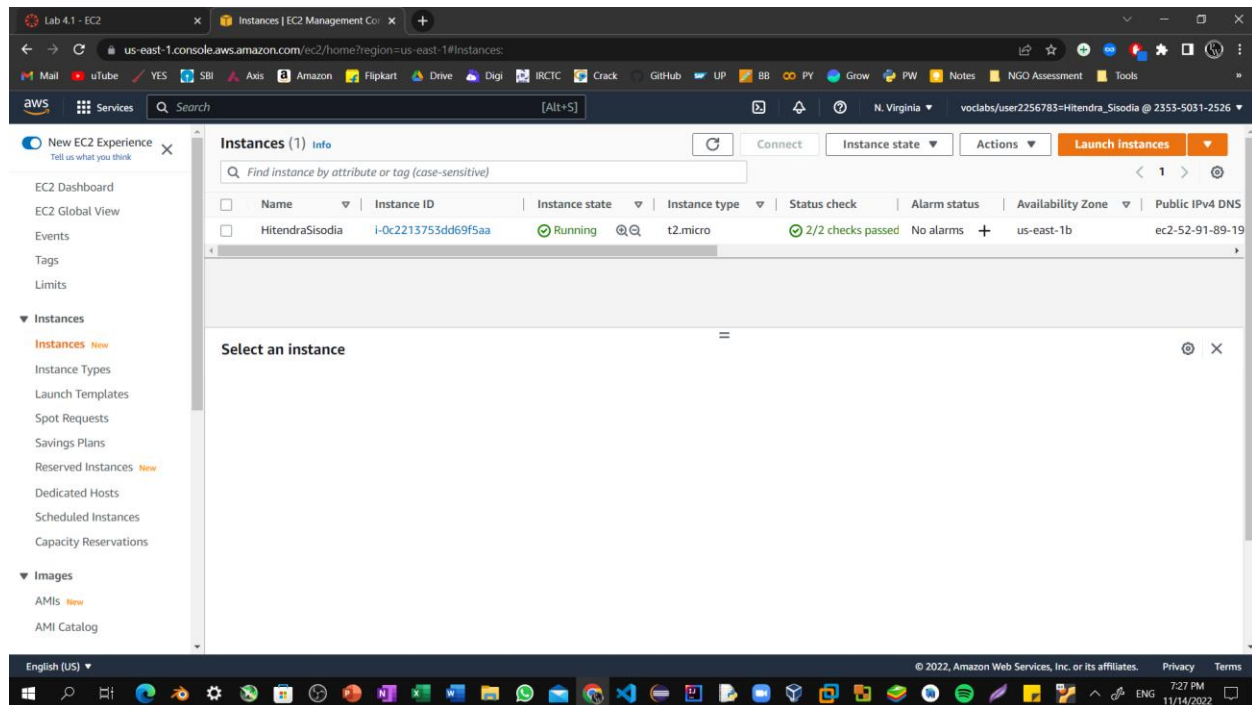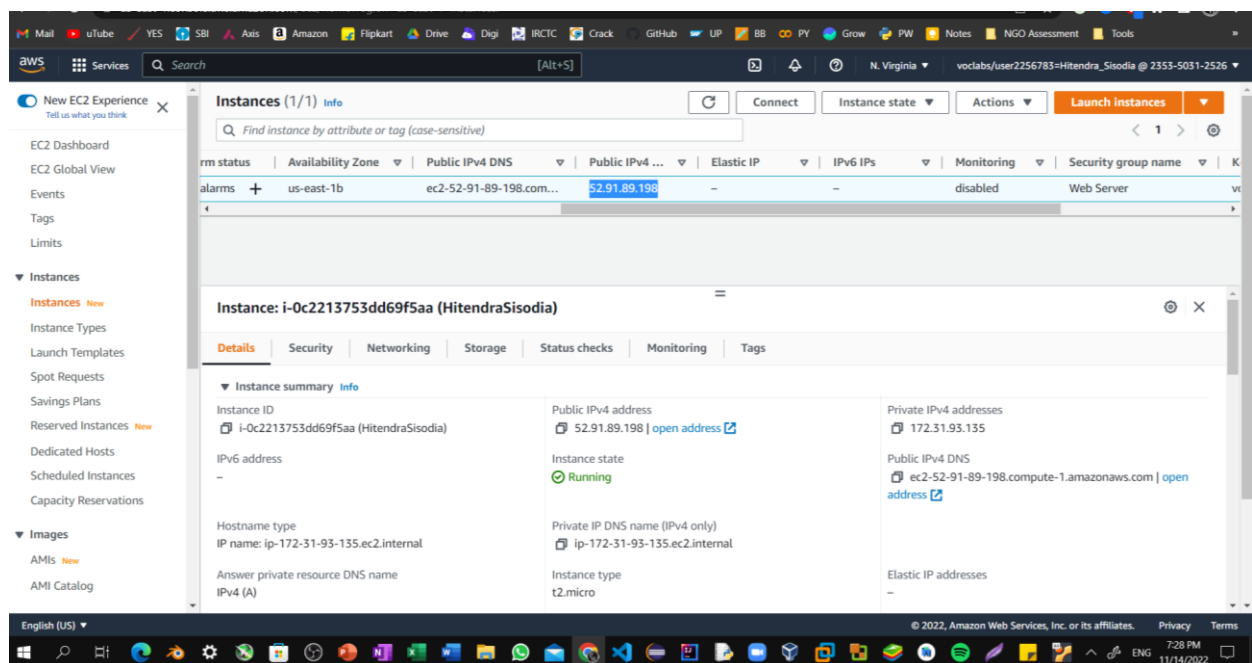
Lab 11: Launching an EC2 Instance With EBS Storage

Step17: Before you continue, wait for your instance to display the following:

**Instance state:** *Running*

Status check: *2/2 checks passed*

**Step18:** From the **Details** tab, copy the **Public IPv4 address** value of your instance to your clipboard.

Lab 11: Launching an EC2 Instance With EBS Storage

Step19: Open a new tab in your web browser, paste the public IP address you just copied, and press **Enter**.

The webpage does not load. You must update the security group to be able to access the page.
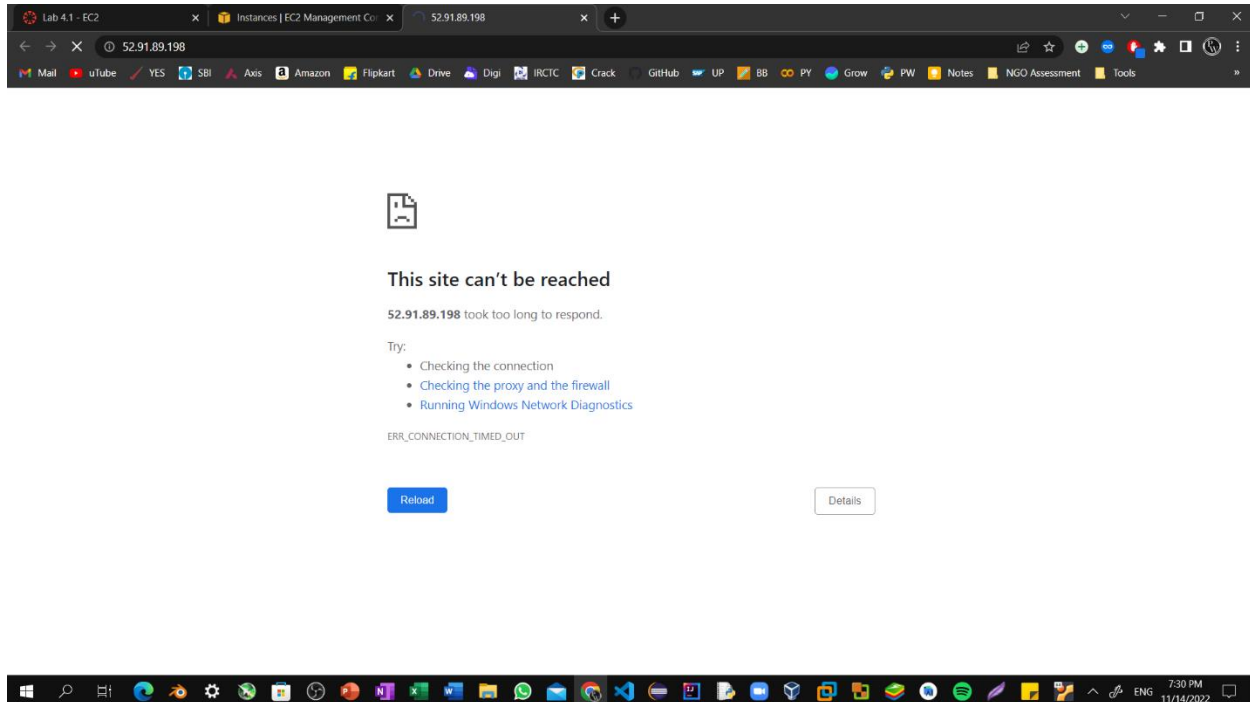
Step20: Return to the **EC2 Management Console** browser tab.

In the left navigation pane, under **Network & Security**, choose **Security Groups**.
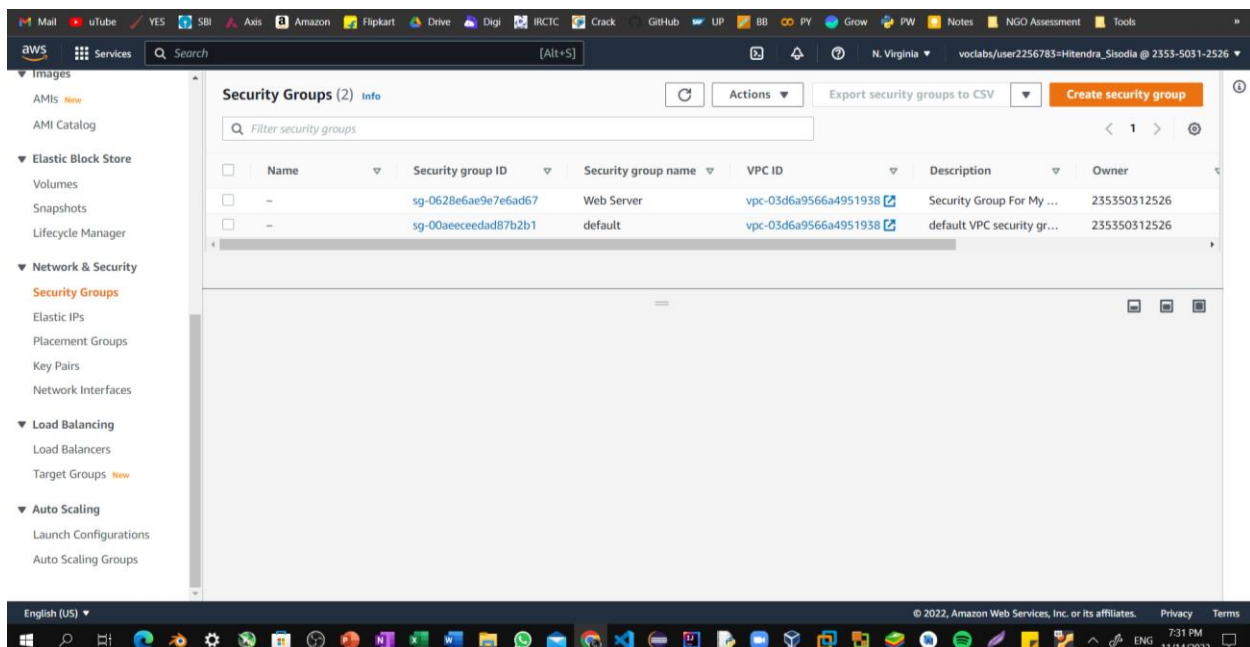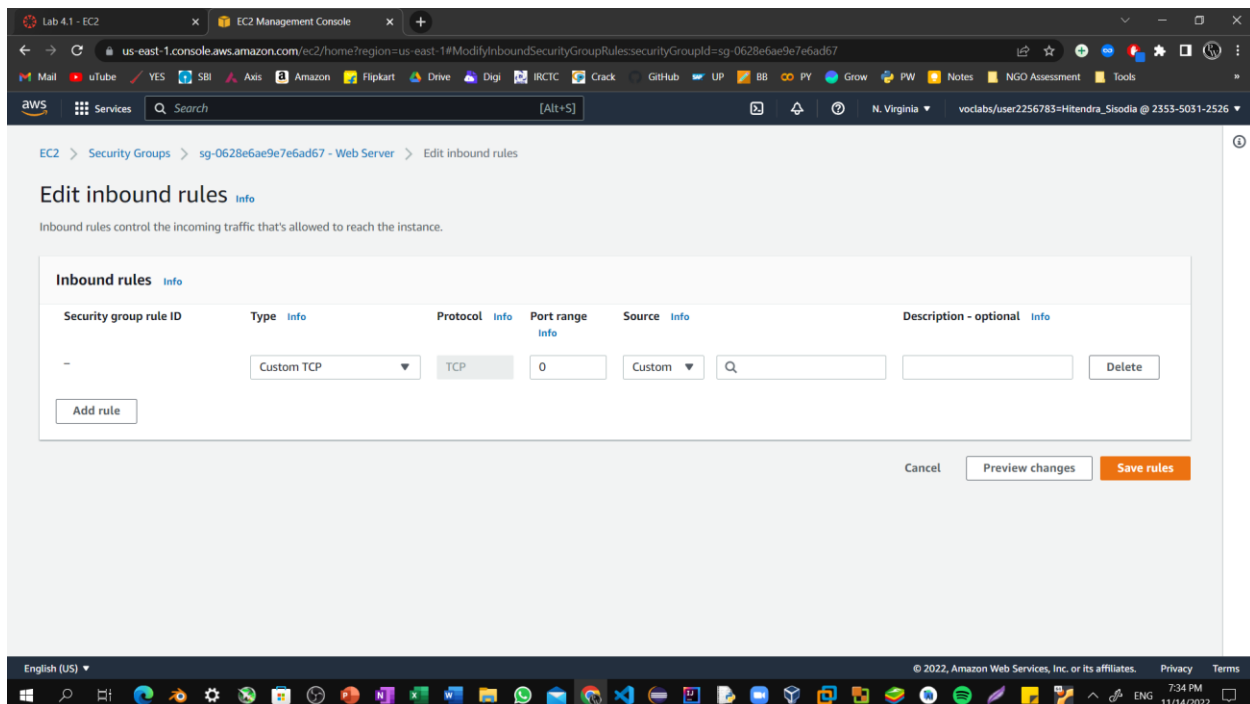
Lab 11: Launching an EC2 Instance With EBS Storage

Step21: Select the **Web Server** security group, which you created when launching your EC2 instance. In the lower pane, choose the **Inbound rules** tab.
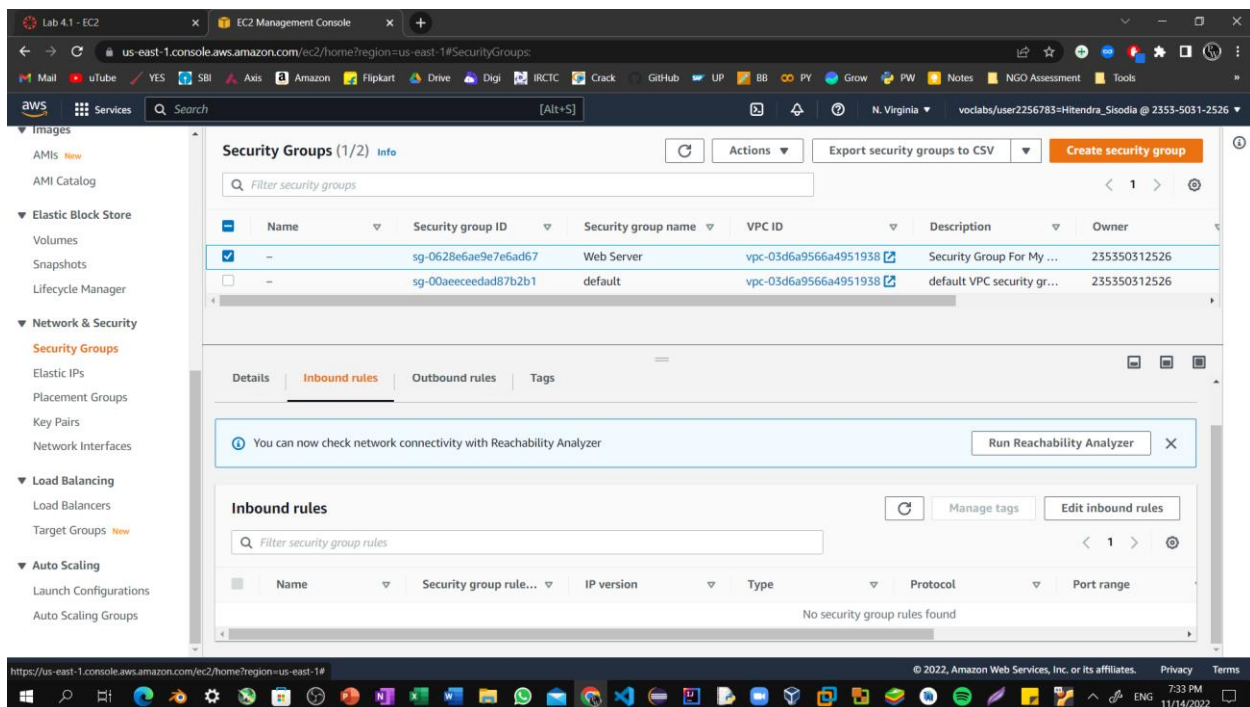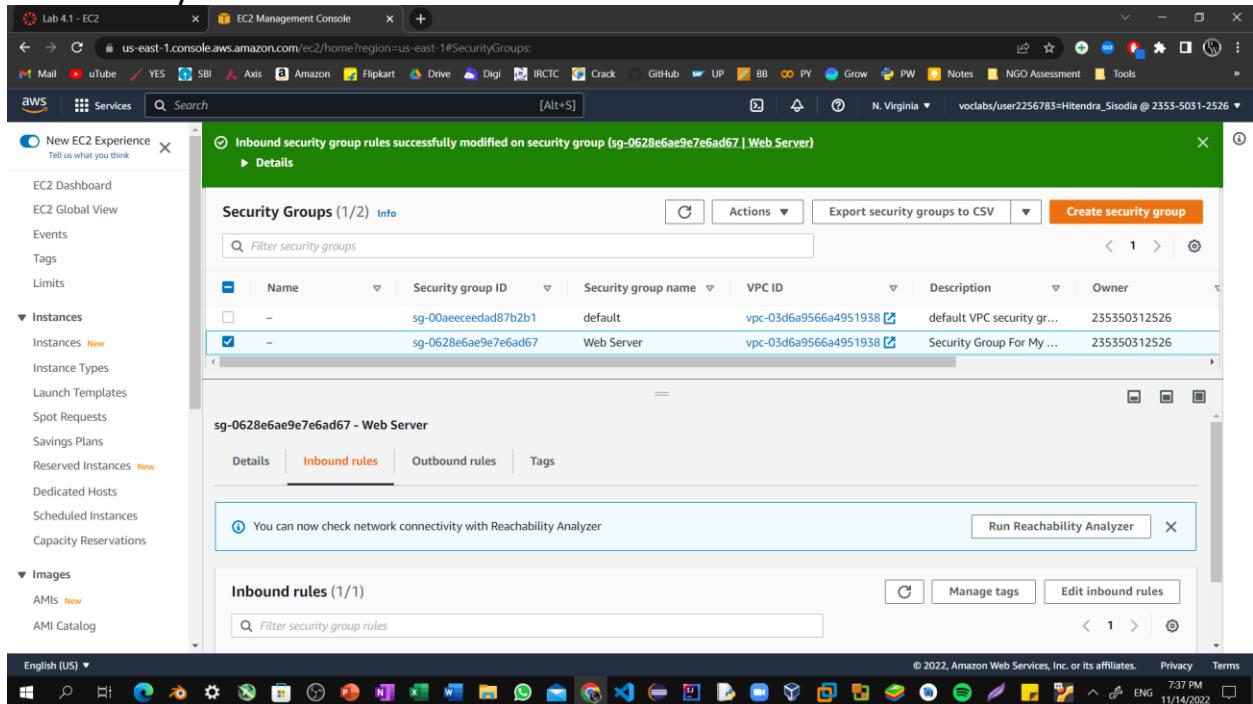

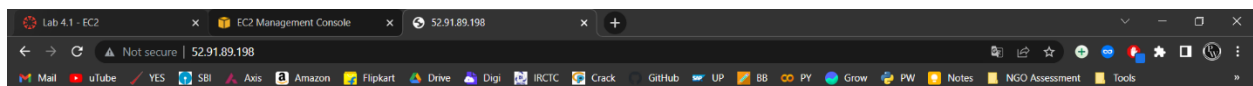Step22: Choose **Edit inbound rules**, and then choose **Add rule**.

Lab 11: Launching an EC2 Instance With EBS Storage

Step23: Configure the following:

Type: HTTP
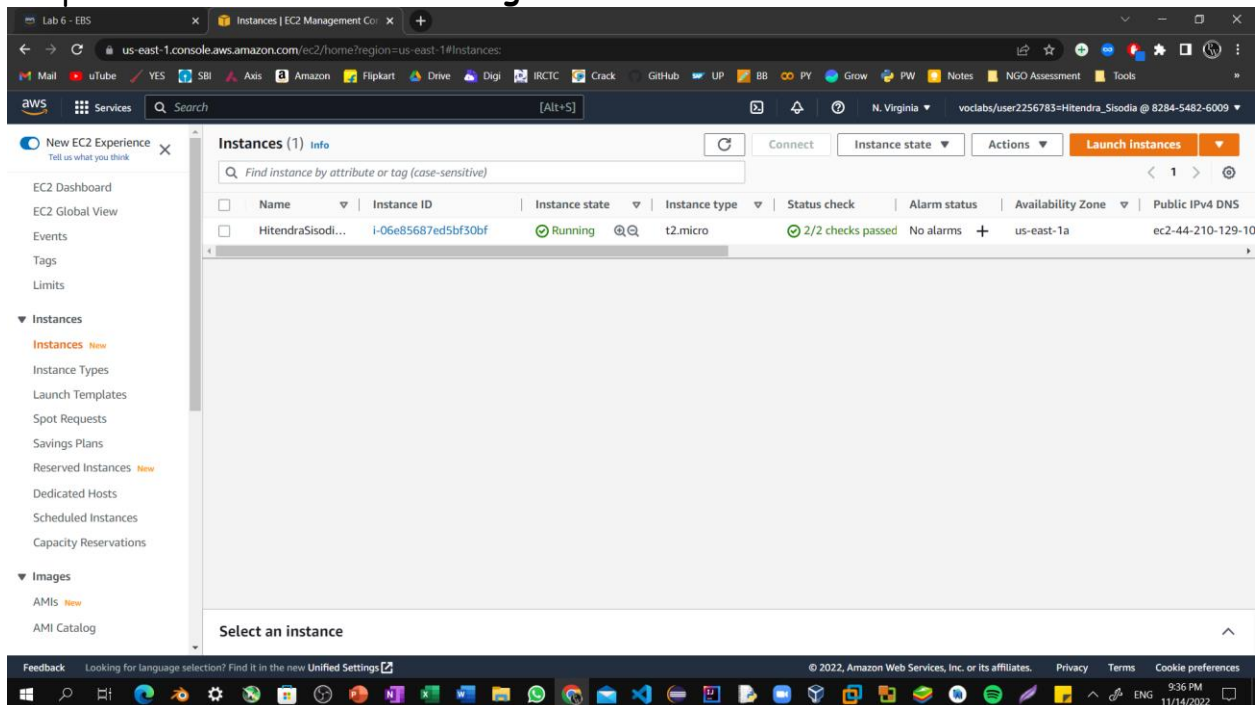
Source: Anywhere-IPv4 Choose **Save rules**

Step24: Return to the tab that you used to try to connect to the web server. The page should display the message *Hitendra Sisodia.*
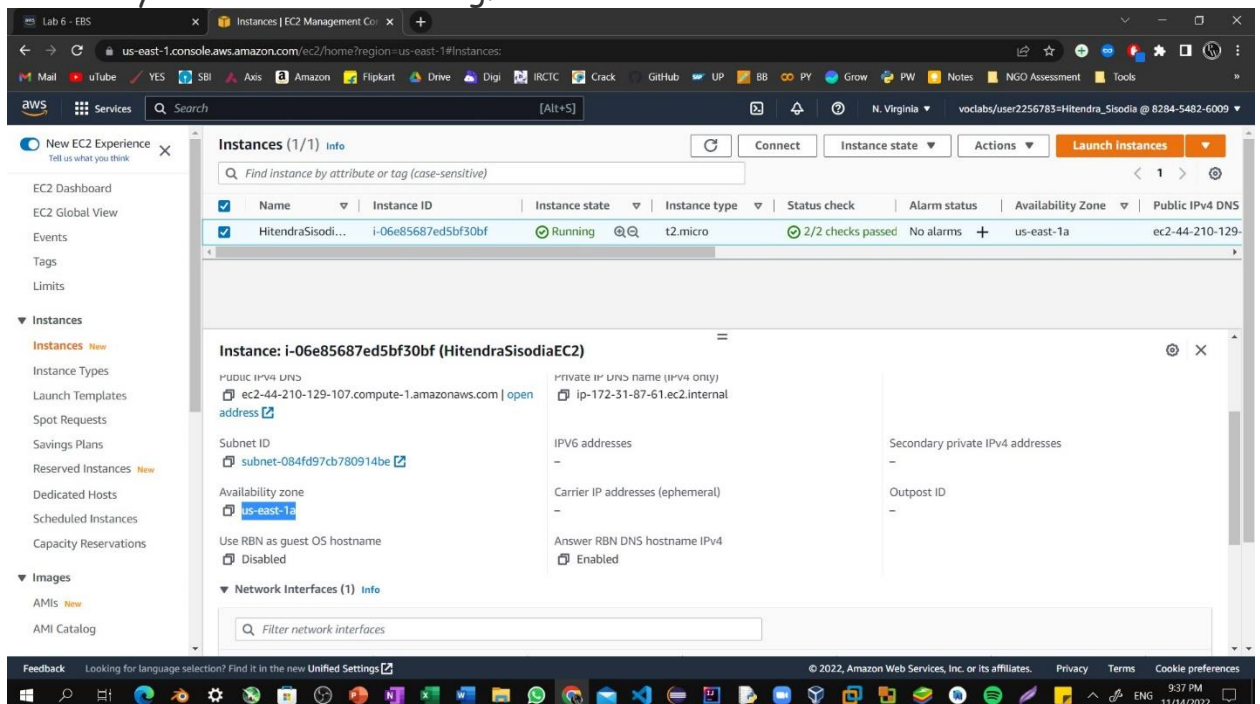
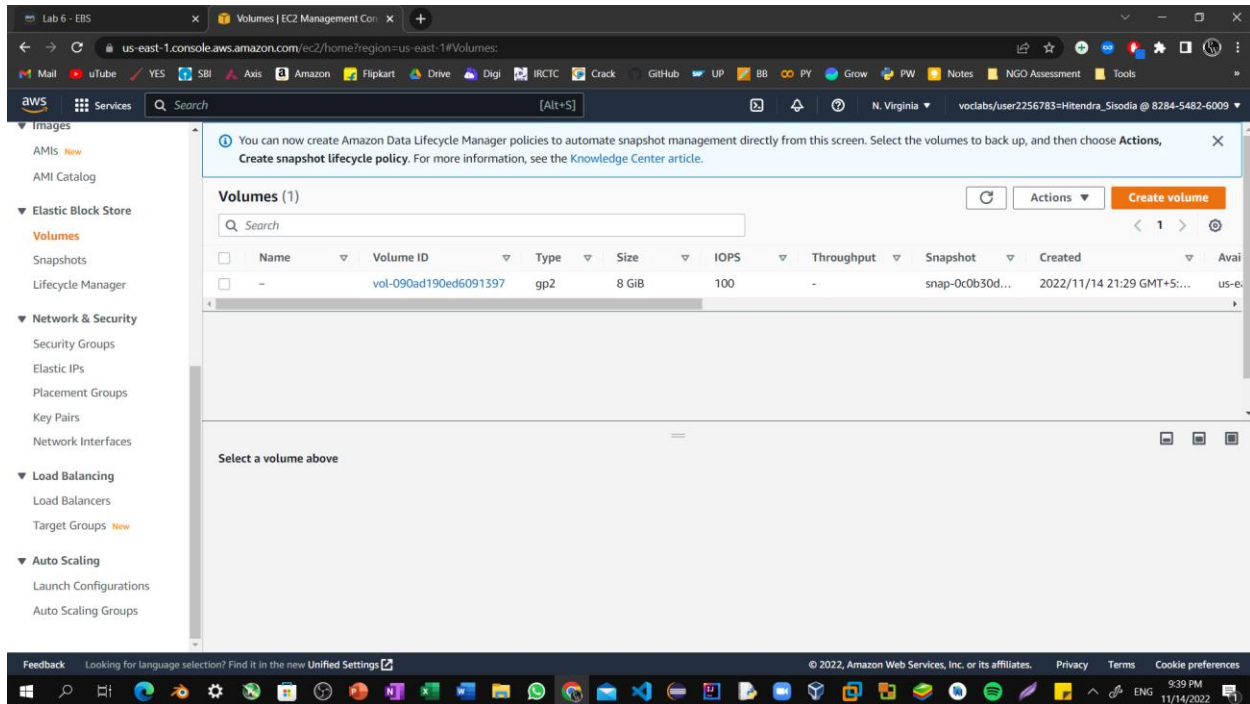Step25: Return to the **EC2 Management Console** browser tab.

Step26: In the left navigation pane, under **Instances**, choose **Instances**. Select the **Web Server** instance, and in the **Networking** tab below, note the **Availability Zone** in which your instance is running.
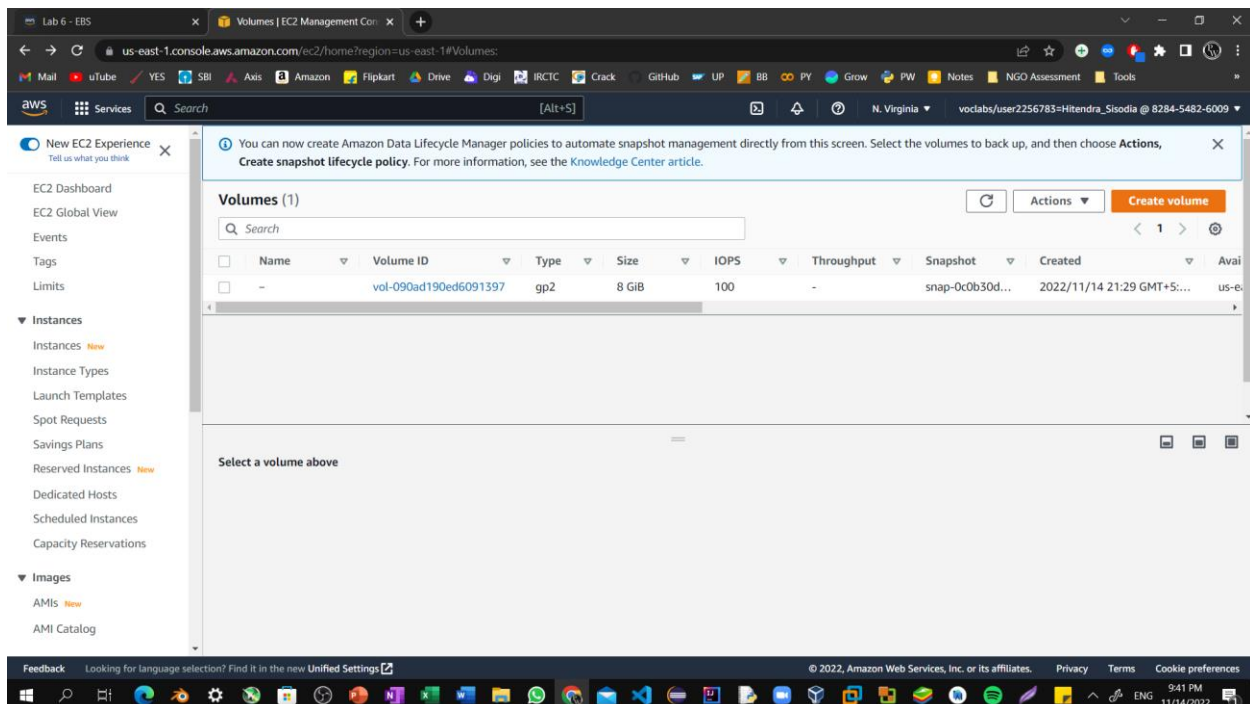
Step27: In the left navigation pane, under **Elastic Block Store**, select **Volumes**.
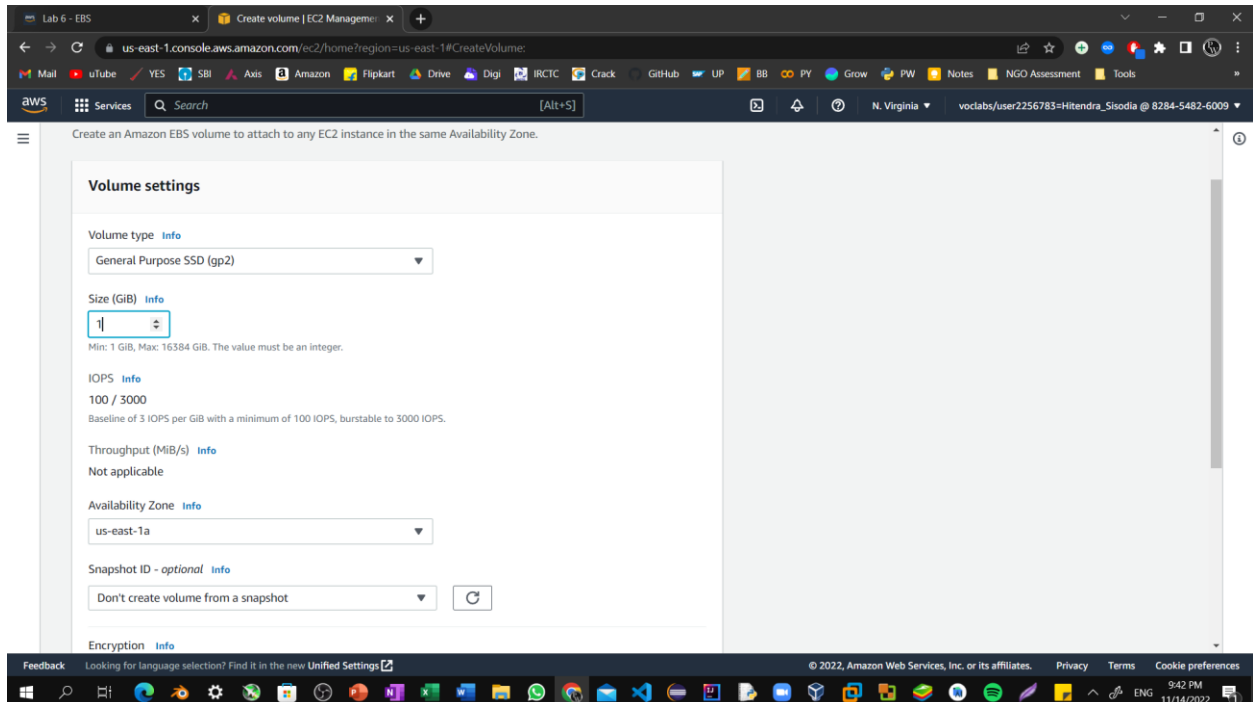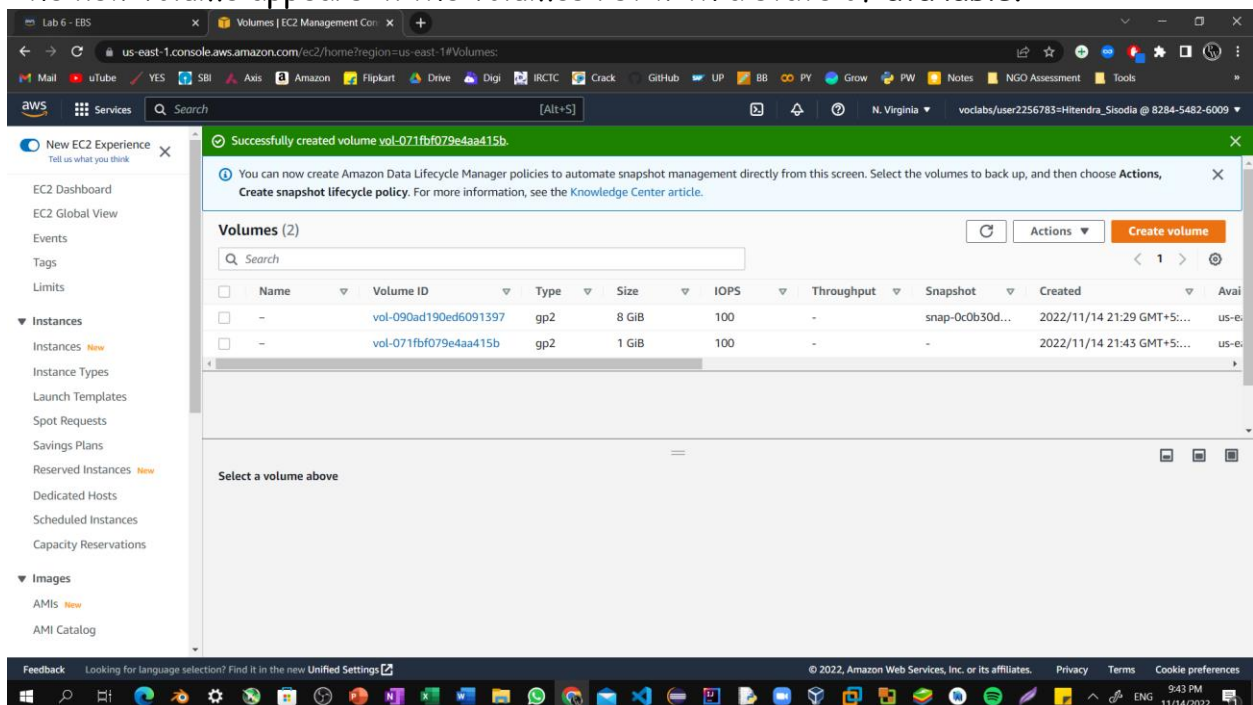

Step28: Select **Create volume**.

Lab 11: Launching an EC2 Instance With EBS Storage

Step29: For **Size**, enter 1 to create a volume with 1 GiB. For **Availability Zone**, select the same Availability Zone that your EC2 instance is running in.
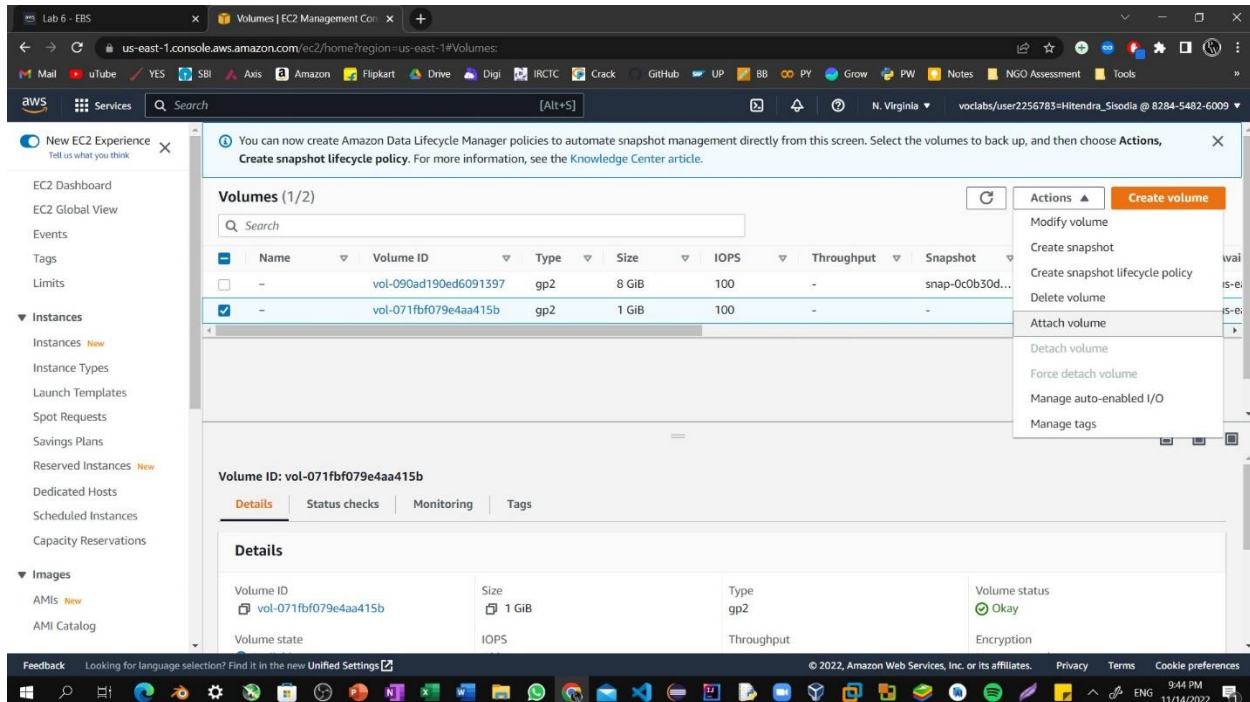

Step30: Scroll down and select **Create volume**.
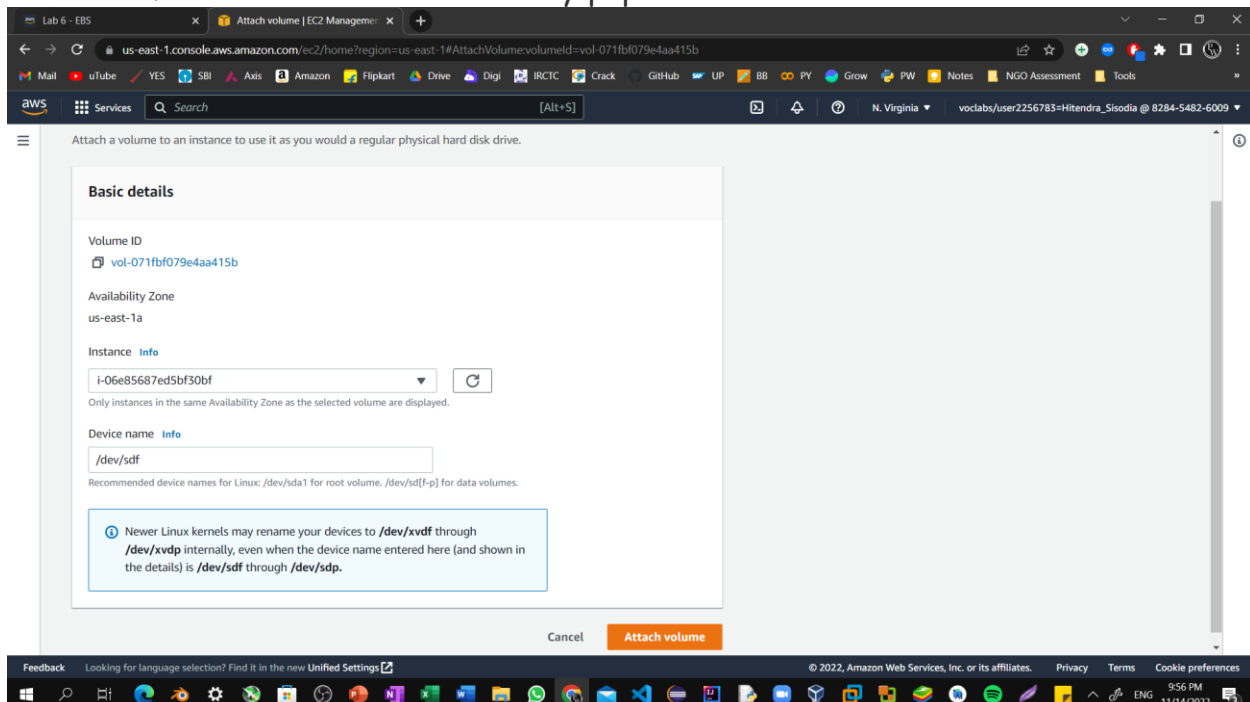The new volume appears in the volumes list with a state of *available*.

Lab 11: Launching an EC2 Instance With EBS Storage

Step31: Select the new 1 GiB size volume. Then, choose **Actions**, and Select **Attach volume**.

Step32: Select the **Instance** drop-down menu, and then select your EC2 instance. The list of instances will automatically populate.
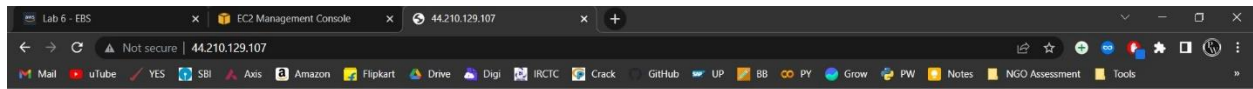
Step33: Select **Attach volume**.

The state of the volume changes to *in-use*. The new volume is now attached to your EC2 instance. Refresh The webpage that we created using EC2 instance now updated with EBS Storage.