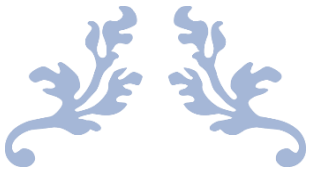

CLOUD COMPUTING PROJECT

DOCUMENTATION

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Project

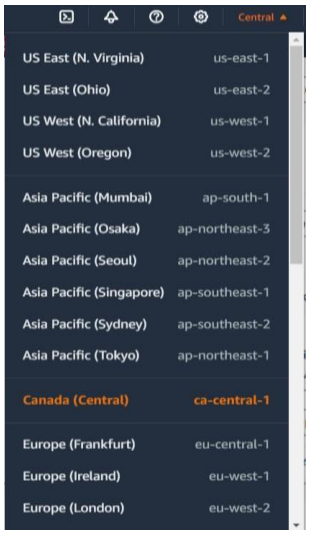
The objective of the Sentiment Analysis Flask Server project is to create a Flask server designed for sentiment analysis utilizing the AWS Comprehend service. This document offers an insight into the project's progression.

Launching a new EC2 Instance

1. Log in to https://myapps.microsoft.com/ using your Humber credentials.

2. Open AWS-Fast AI Academic-53

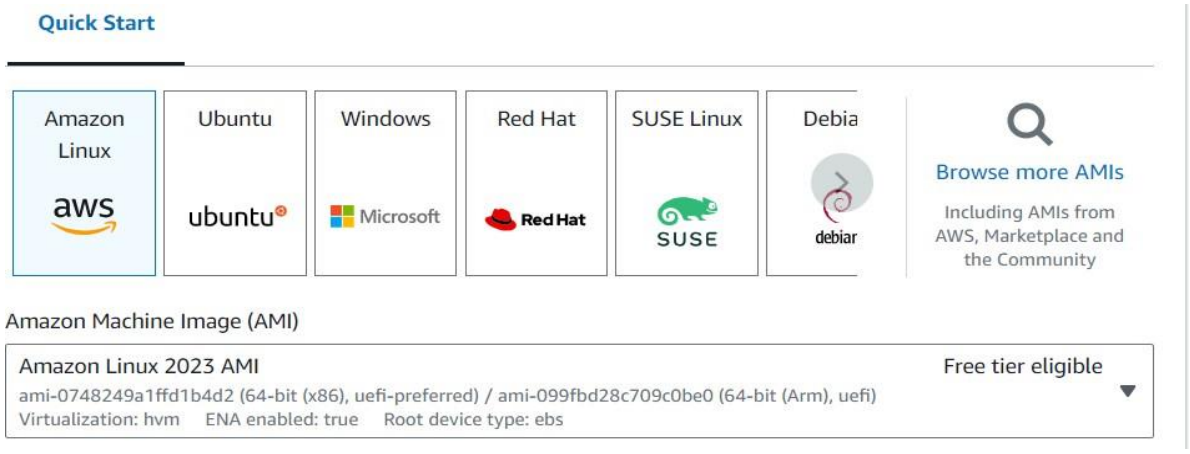
3. Select Canada (Central) (ca-central-1) as the region.



4. Go to the EC2 Dashboard.

5. Select the "Launch Instance" button to initiate the instance creation process.

6. During the "Choose an Amazon Machine Image (AMI)" step, opt for "Amazon Linux (Amazon Linux 2023 AMI)" as the operating system for your instance.



7. In the Key pair (login) section, choose to create a new key pair. Provide a suitable name and then download the .ppk key pair file.

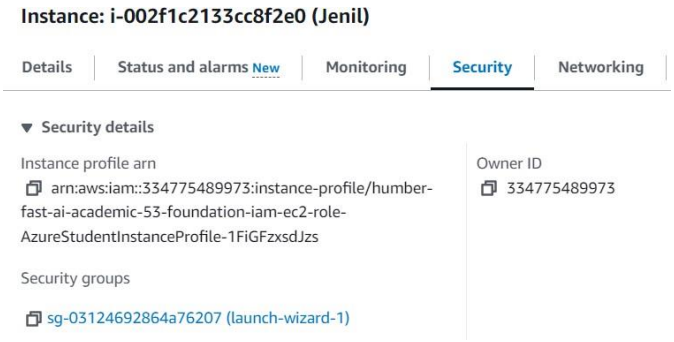
8. In the Network Settings section, choose the subnet "sbn-fast-ai-academic-53-public-ca-central-1a".

9. Enable the option for "Auto-assign public IP" to ensure that the instance is assigned a public IP address automatically.

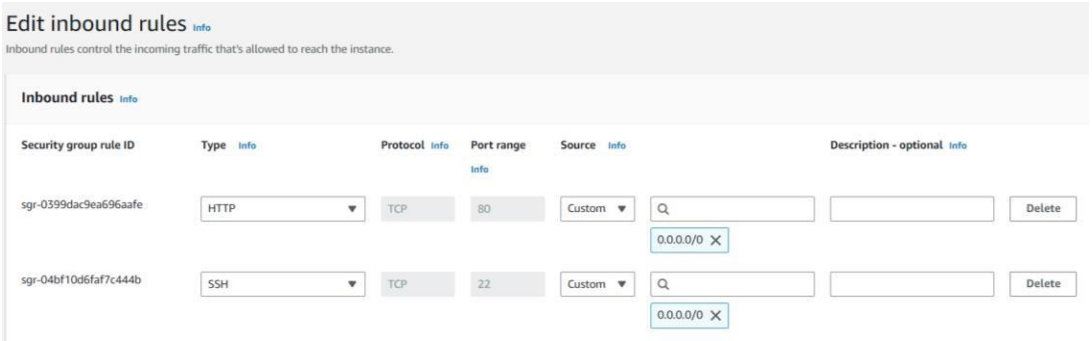
10. In the Firewall (security groups) section, opt to create a new security group and specify a name for it.

11. Click " Launch Instance".

12. Navigate to the EC2 dashboard and choose the newly created instance. Then, in the "Security" tab, click on the link corresponding to the security group name to edit the security group's rules.



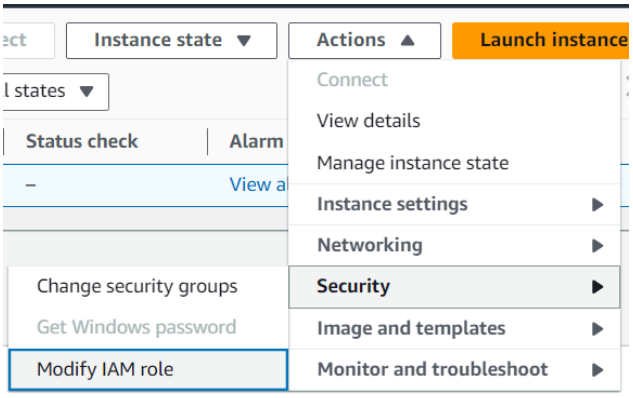
13. Edit the inbound rules by adding an HTTP rule with port range 80 and source as custom 0.0.0.0/0, then save the rules.



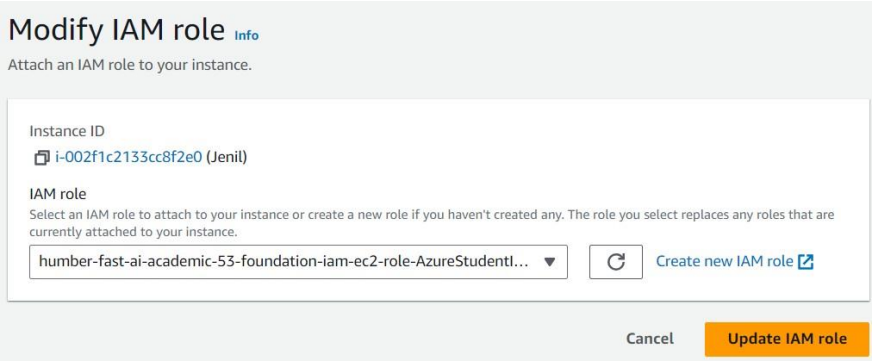
14. In the EC2 side panel, navigate to the "Network and Security" section, and select "Elastic IP".

15. Click on the Elastic IP, then choose "Allocate Elastic IP Address", proceed to select the instance, and finally click on "Associate" to complete the process.

16. Go to the EC2 instances, choose the instance, then select Actions > Security > Modify IAM Role.



17. Select fast-ai-academic-53-Student-EC2 role and click Update IAM Role.



18. Lastly, select the EC2 instance and initiate it by clicking Start Instance.

To connect to your EC2 instance using PuTTY, here are the steps you should follow:

1. Open PuTTy.

2. In the Host Name (or IP address) field, input the public IP address of your EC2 instance.

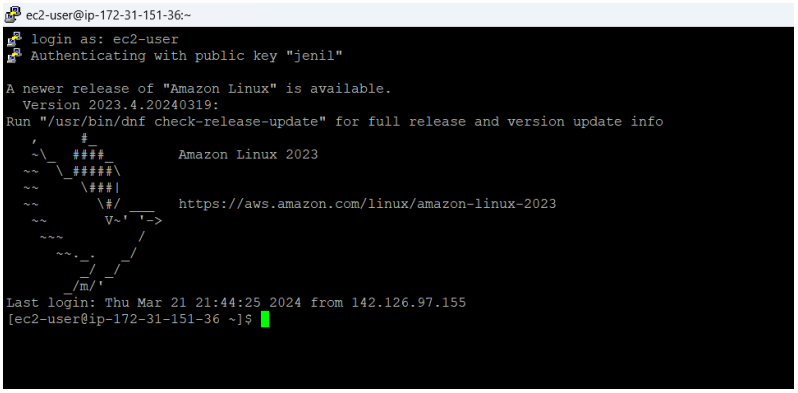
3. Navigate to "Connection," then expand "SSH" and select "Auth."

4. Click on "Browse" to locate and choose the .ppk private key file

5. After selecting the file, ensure to save these configurations by entering a name in the "Saved Sessions" field and clicking the "Save" button

6. Proceed by clicking the "Open" button to initiate the SSH session.

7. Enter the username ec2-user.



8. Make a new directory called ‘project’ using mkdir.

9. To install Python 3.9 on your EC2 instance, execute the following commands using the package manager. These commands are applicable for Amazon Linux:

. sudo yum update

. sudo yum install python3

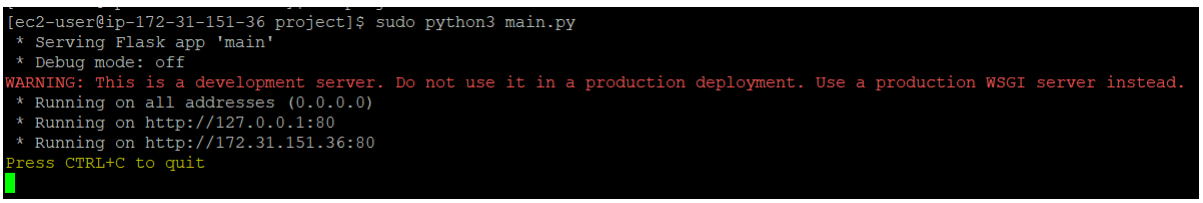
. sudo yum install python3-pip

Launching the Server

1. Run the Python script ‘main.py’ that contains your server code. Use the following command to execute the script:

sudo python3 main.py

2. The server is running on port 80.



Website

The final Website can accessed by the URL: http://15.157.105.184/