Programming Assignment 1
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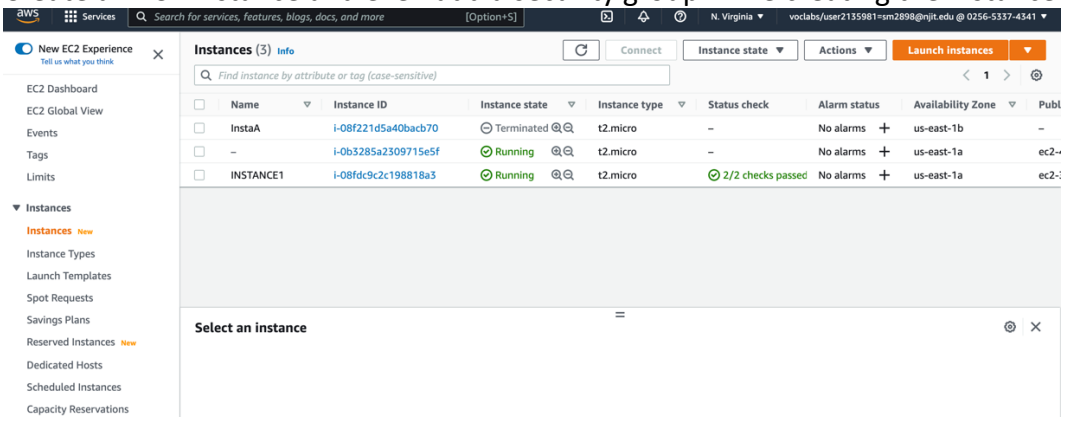
Procedure:

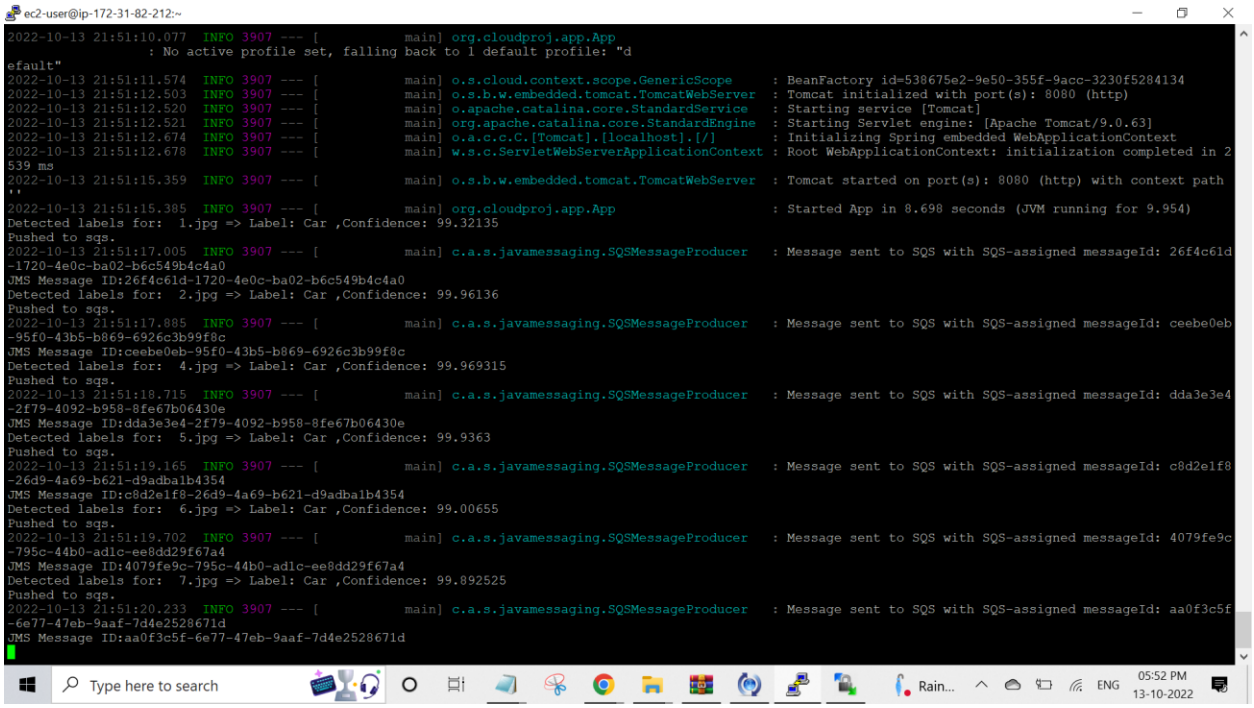
1. Get the credential details from the AWS learners lab.
2. Create an AWS file in the local machine and add the AWS details provided in the learners lab.
3. Create an EC2 instance and even add a security group while creating the instance.



4. Download the putty and convert the key pair into a PPK file to use in the putty. The key pair is generated while creating an EC2 instance and is converted by puttygen.
5. Open putty and connect to the two EC2 instances separately by using WINSCP and using the same key pair while creating instances.
6. Install java to run our application on the instance.
7. Execute the jar files to run our file.

INSTANCE 1

1. We are creating Instance A to read images from an S3 bucket and perform object detection in the images.
2. First, we are creating an amazon client using AWS details.
3. Then we create a recognition client to access the objects from the bucket.
4. Then we create a connection with all credentials and region.
5. Then we create an Amazon SQS FIFO queue.
6. When a car is detected using Recognition, with confidence higher than 90%, the index of that image is stored in SQS
7. Then we push these objects that satisfied the condition into the queue
8. Screenshot of the jar file of instance1 using the command java -jar <jarname>.



INSTANCE 2

1. Instance B reads indexes of images from SQS as soon as these indexes become available in the queue and performs text recognition on the images.
2. The keys that are returned from the queue will be obtained from the S3 bucket and then passed to identify text using Rekognition. First, we must connect to the queue where messages from the queue are received.
3. Screenshot of the jar file of instance2 using the command java -jar <jarname>