**Project**

**Topic: Deploy a Multi-tier website using EC2**

Company ABC wants to move their product to AWS. They have the following things setup right now: 1. MySQL DB

2. Website (PHP)

The Company wants high availability on this product, therefore wants auto scaling to be enabled on this website.

**SOLUTION:** First we will create EC2 and update & install required Software’s

• First update your system using the command

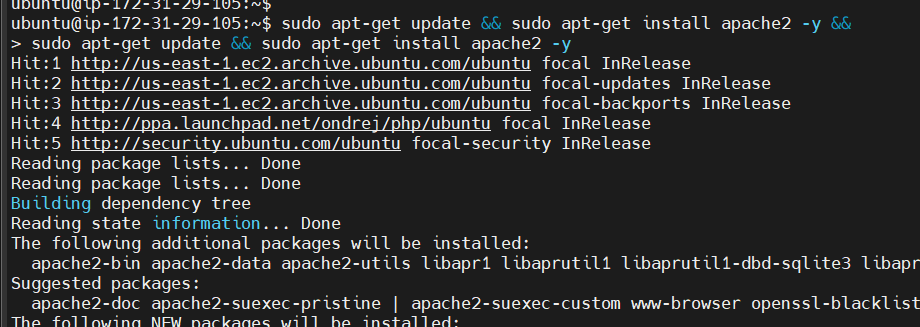
* sudo apt-get update

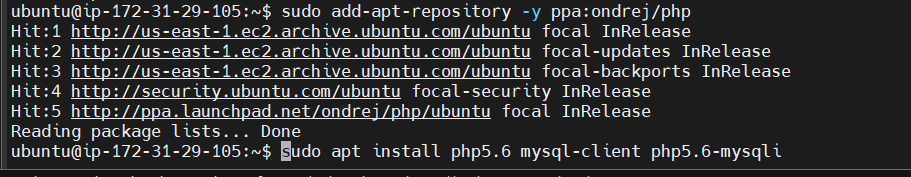
• Then use this command in PuTTY to install Apache2

* sudo apt-get install apache2

• Then install php-mysql using the following command

* sudo add-apt-repository -y ppa:ondrej/php
* sudo apt install php5.6 mysql-client php5.6-mysqli



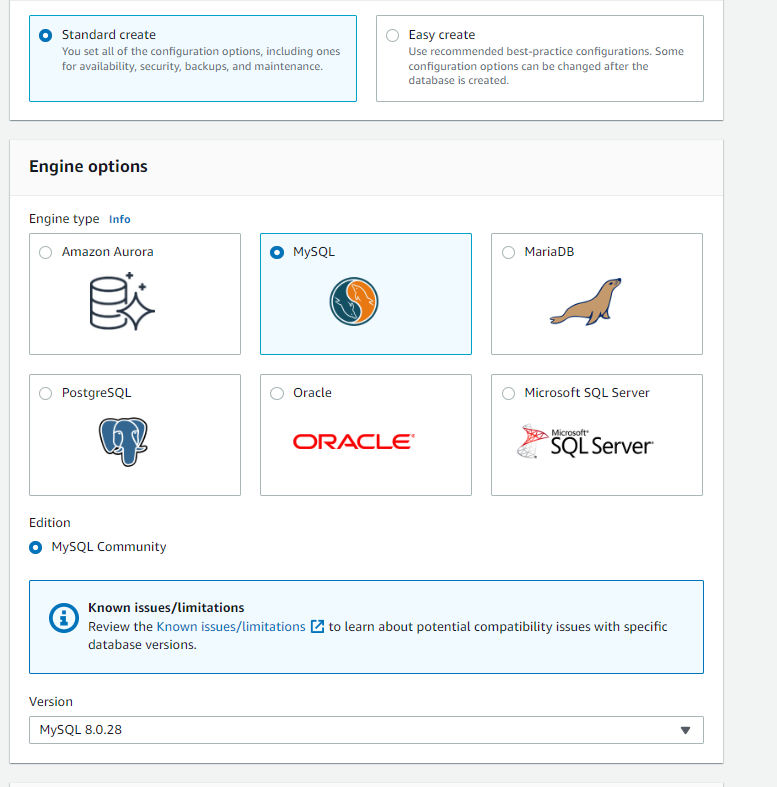


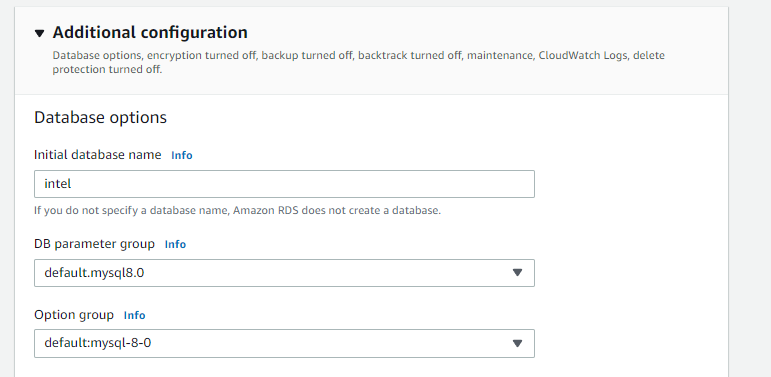
**Create Database & Table in RDS Instance**

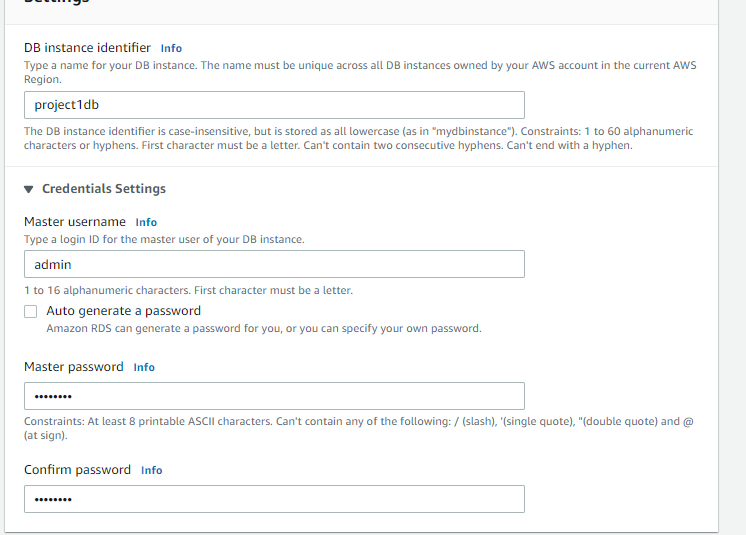
• Database name: intel

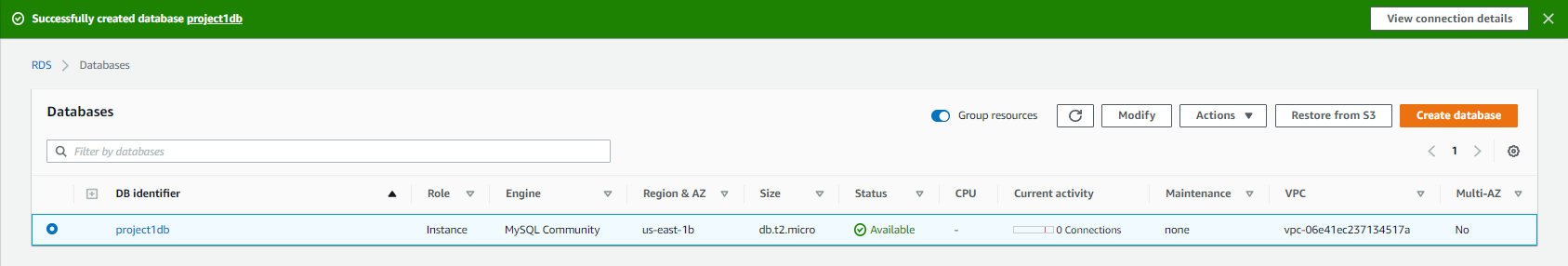
• Table name: data

• Database password: intel123









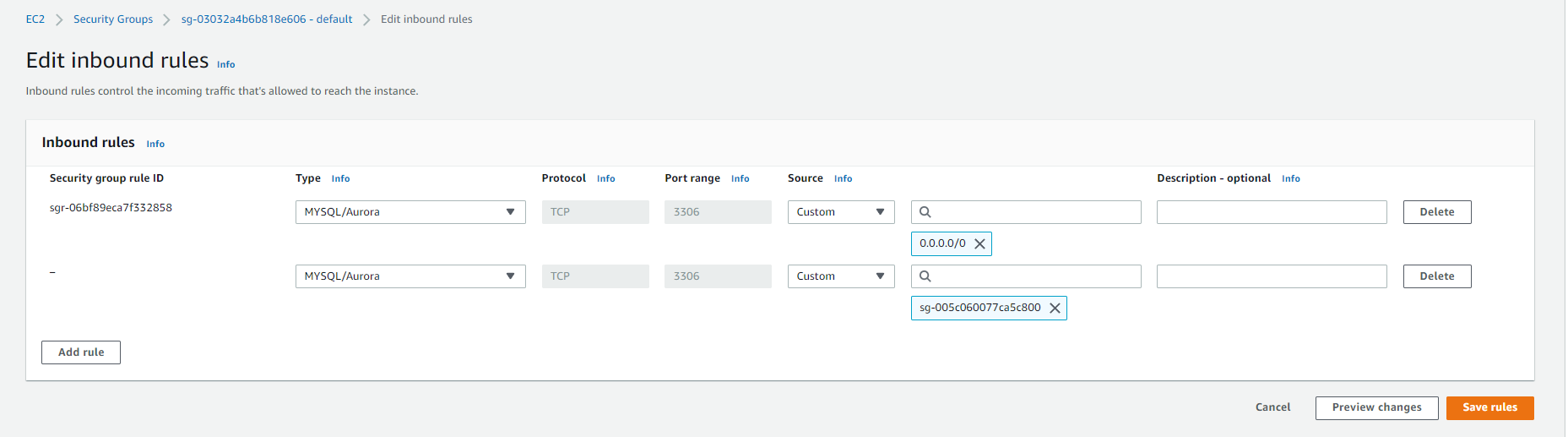
• In few minutes, you will be able to see the Endpoint and Port

• Also, make sure to change some security configuration in the RDS

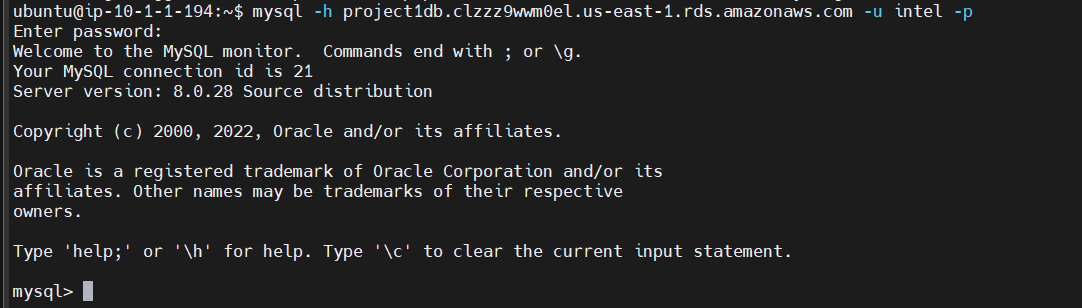
• Go to your EC2 Instance Security Groups and select your group ID “sg-005c060077ca5c800”

Then go to RDS Security groups and select the Inbound rules panel there and click on Add Rule

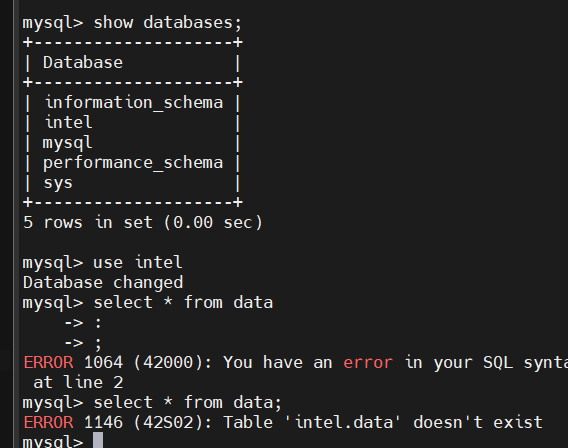
• Then paste the EC2 Security ID in Source> Custom > Security Group bykeeping the Type as MYSQL/Aurora



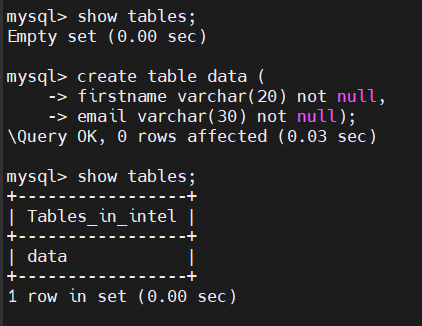
Now we will connect the ec2 to MySQL.



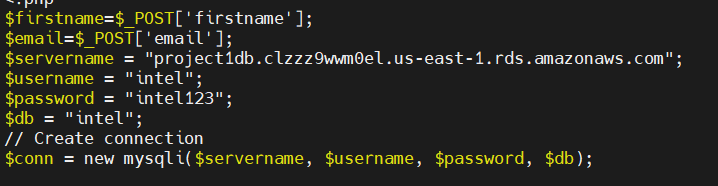
Now here we have changed our data base to RDS database “intel”



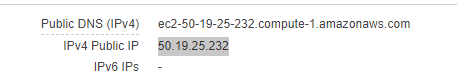
Now we will create table under intel

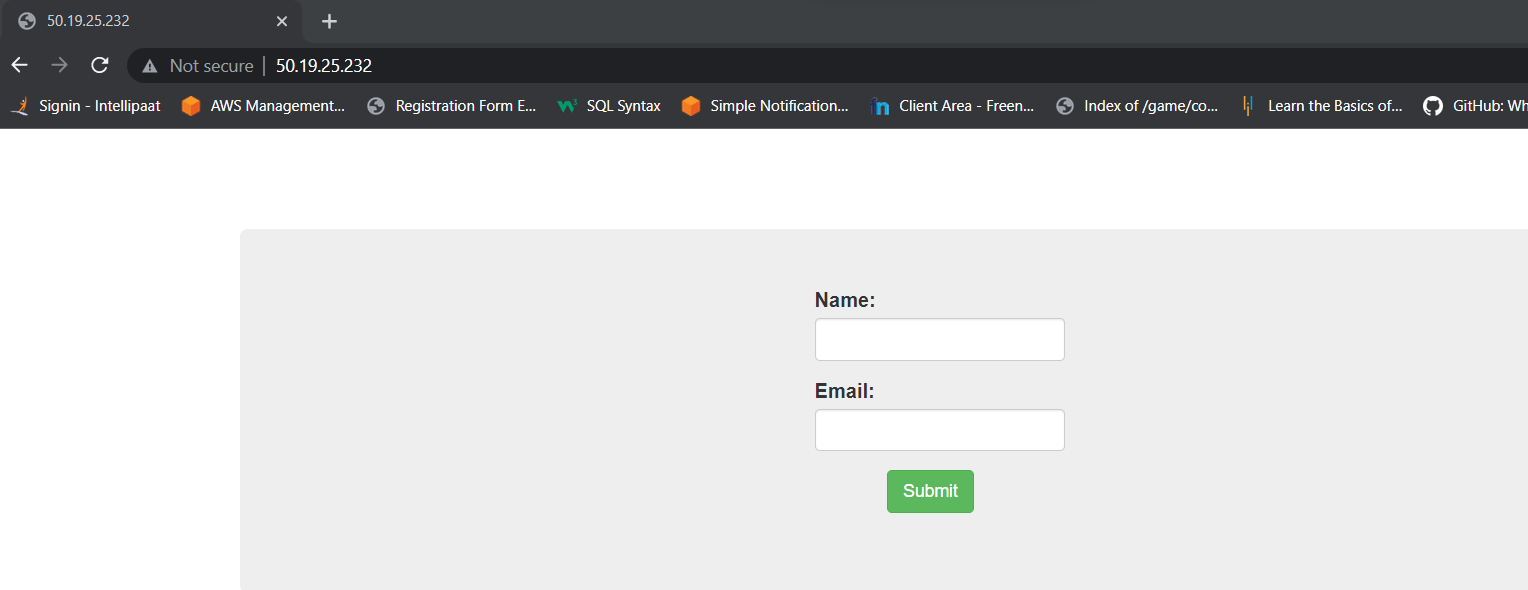


Now go to the index.php where you have to make changes in your code, you have to check if in your server name, the endpoint of your RDS is there along with username, password and db name.

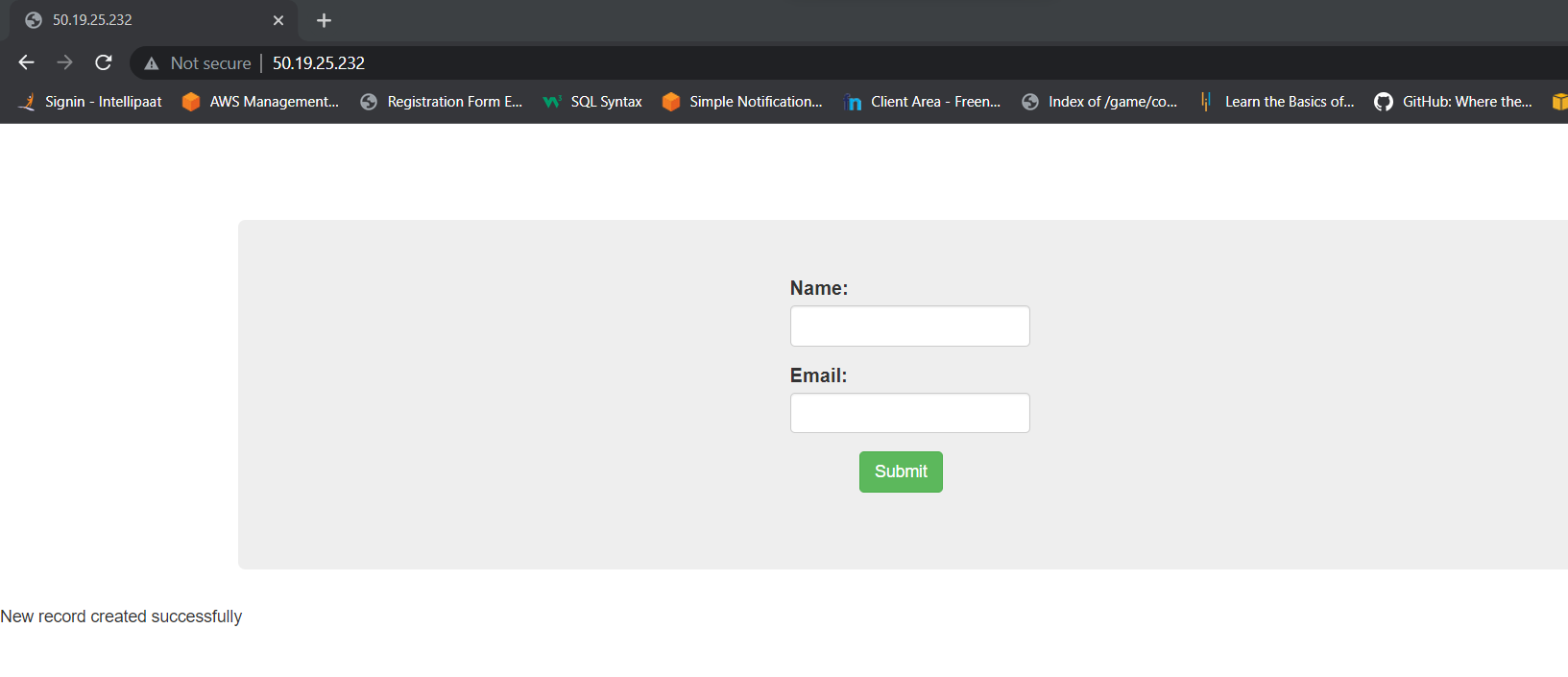


• Now when you will try, and copy paste the Public IP of your EC2 Instance and see the result if the website is working or not.

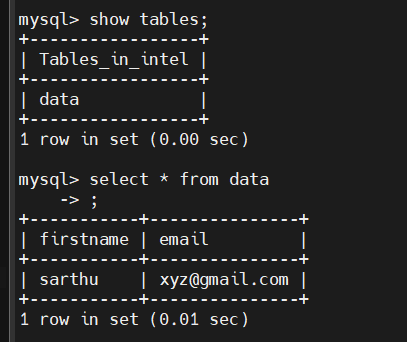




After entering the info in above field and press submit. Got the message for successfully submission.

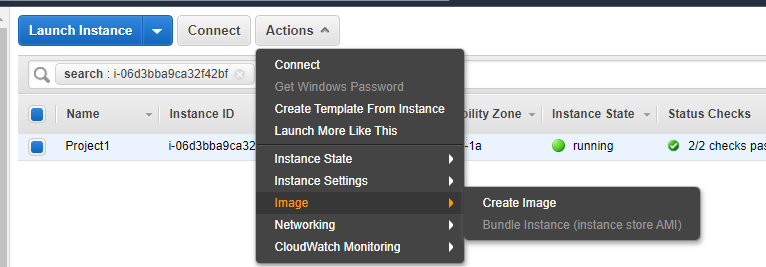


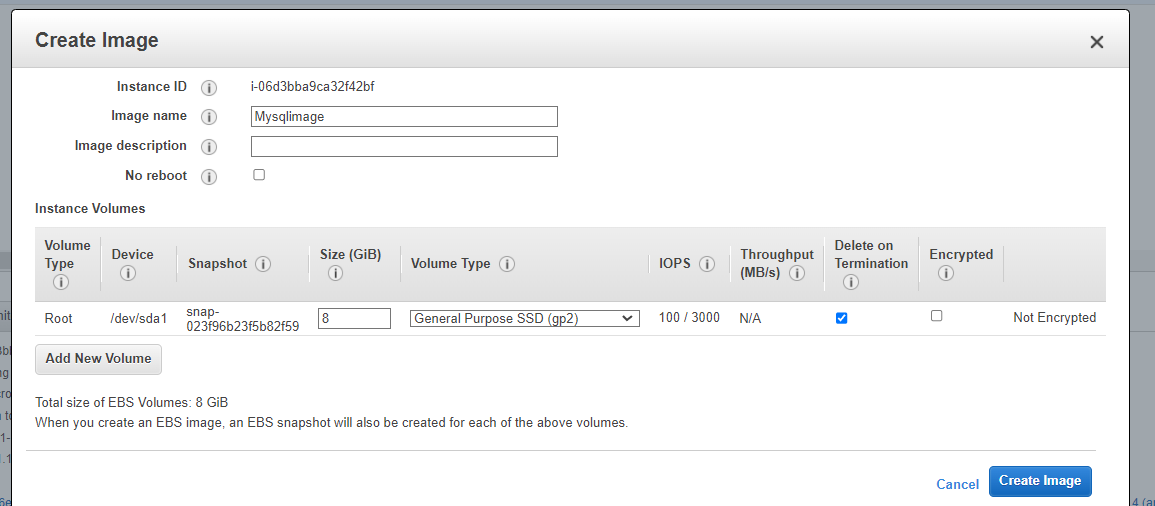
And also we can check in our SQL if the data is there or not.

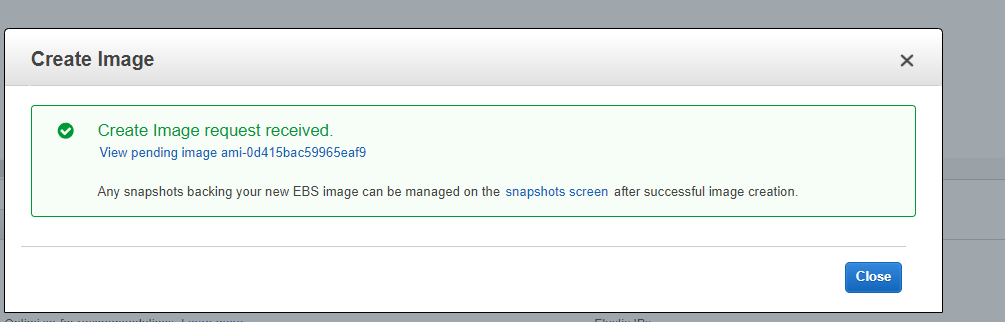


For Auto Scaling.

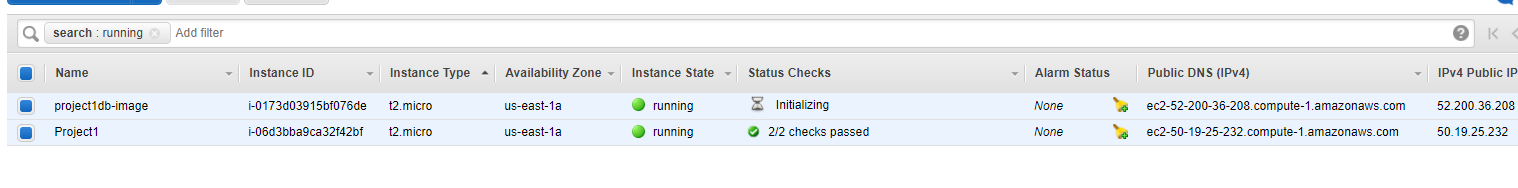
Now, we’ll do the autoscaling of our website by going to our EC2 Instance and then click on Actions and Create Image.







After the ami created we will launch the other machine with same image.



Then further, activate its auto scaling and then its classic load balancer which directs the traffic to your website directly.