AWS Certification Course

Project

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

**Description:** Amazon Elastic Compute Cloud (Amazon EC2) provides scalable computing capacity in the Amazon Web Services (AWS) cloud. Using Amazon EC2 eliminates your need to invest in hardware up front, so you can develop and deploy applications faster. You can use Amazon EC2 to launch as many or as few virtual servers as you need, configure security and networking, and manage storage. Amazon EC2 enables you to scale up or down to handle changes in requirements or spikes in popularity, reducing your need to forecast traffic.

**Problem Statement:**

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

1. MySQL DB
2. Website (PHP)

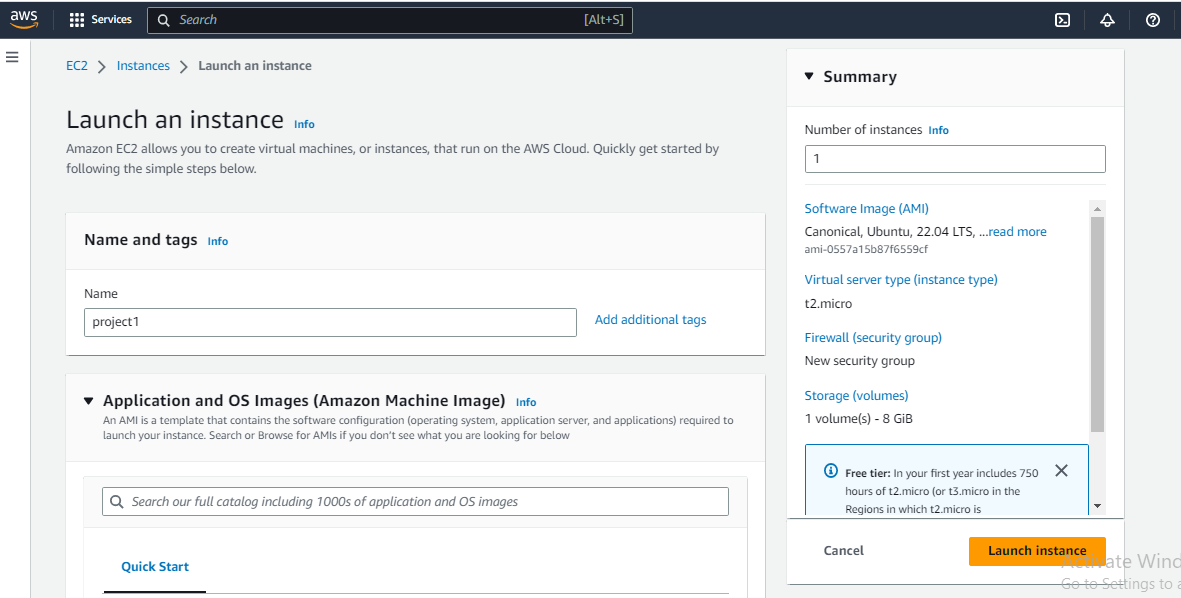
The company wants high availability on this product, therefore wants auto scaling to be enabled on this website.

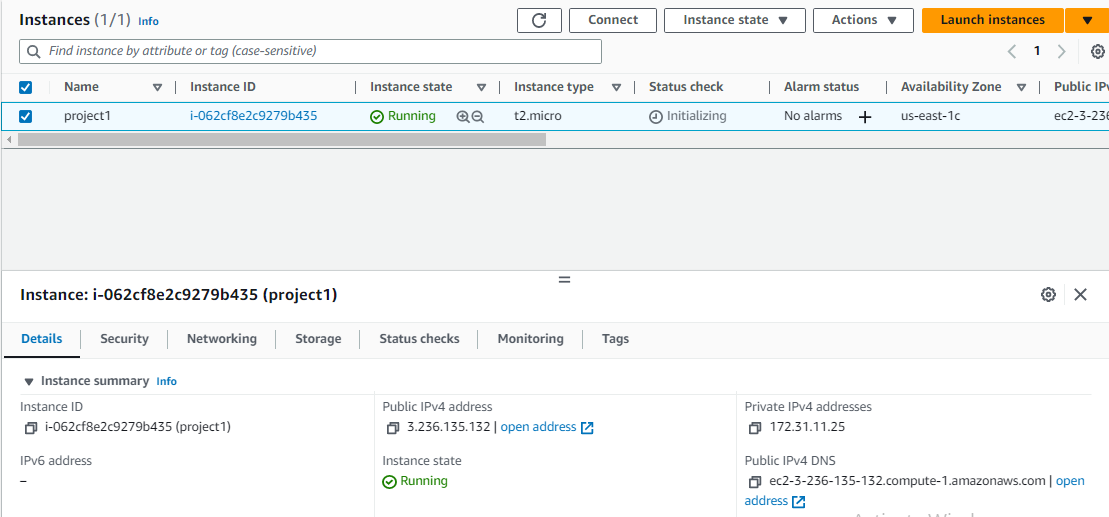
**Steps to solve:**

1. Launch an EC2 Instance
2. Enable Auto Scaling on these instances (minimum 2)
3. Create an RDS Instance
4. Create Database & Table in RDS Instance
   * Database name: intel
   * Table name: data
   * Database password: intel123
5. Change hostname in website
6. Allow traffic from EC2 to RDS Instance
7. Allow all-traffic to EC2 instance

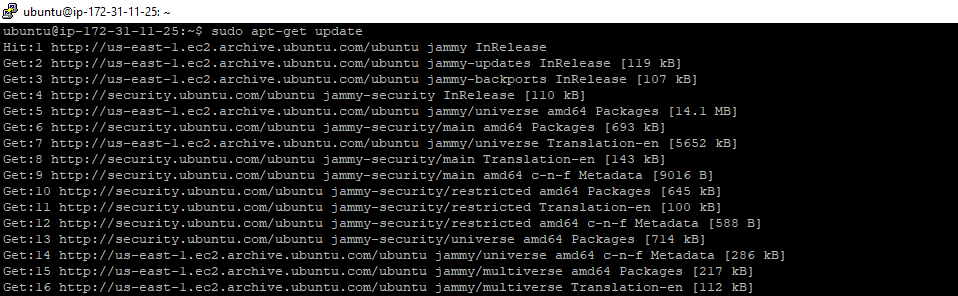
[**support@intellipaat.com**](mailto:support@intellipaat.com) **- +91-7022374614 - US: 1-800-216-8930 (Toll Free)**

* First go to the EC2 dashboard and click on launch instance
* I am using default VPC. We can also create a custom VPC.

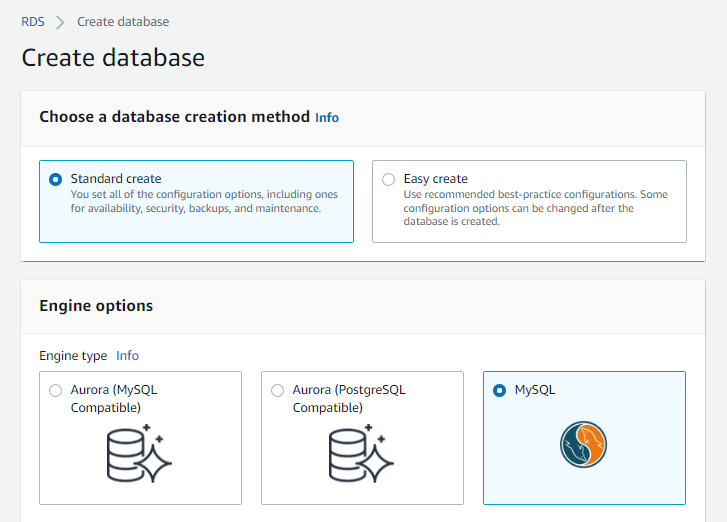


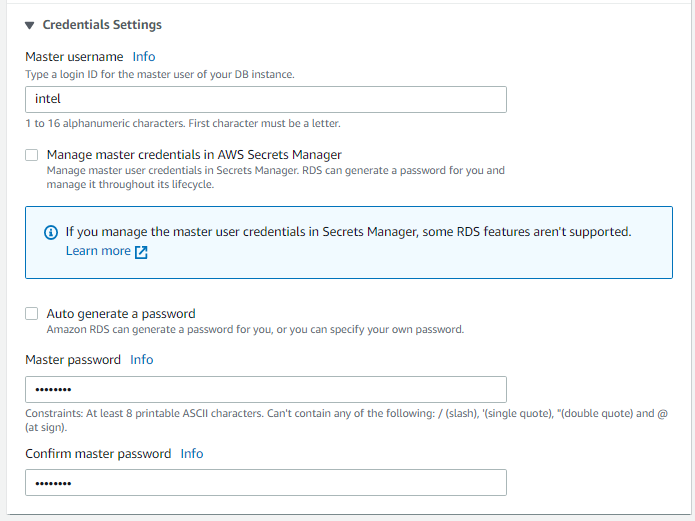


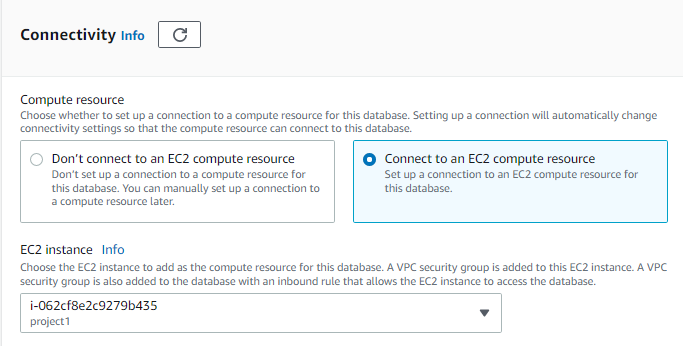
* Connect and update the instance

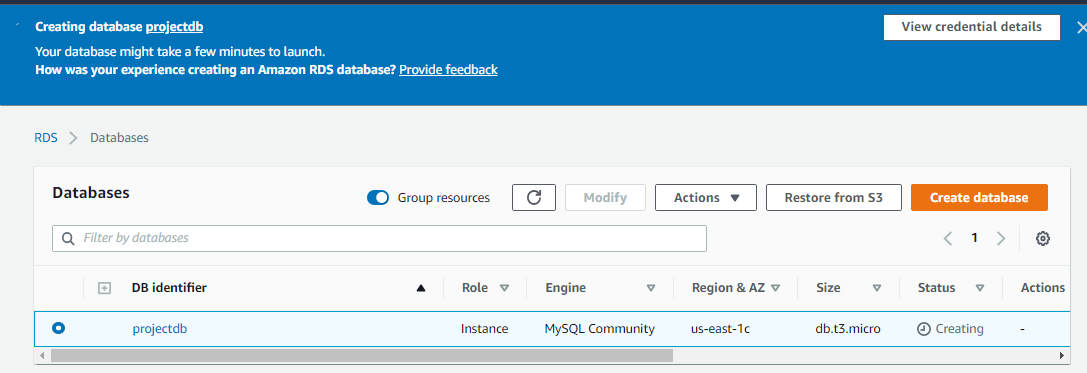


* Now let us create a RDS instance
* Select MY SQL

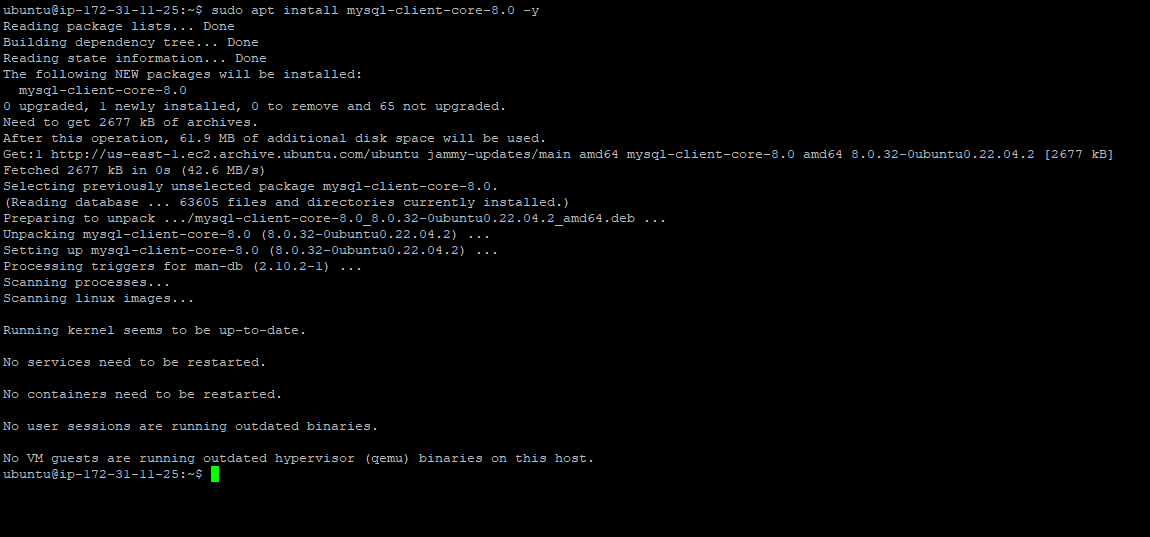




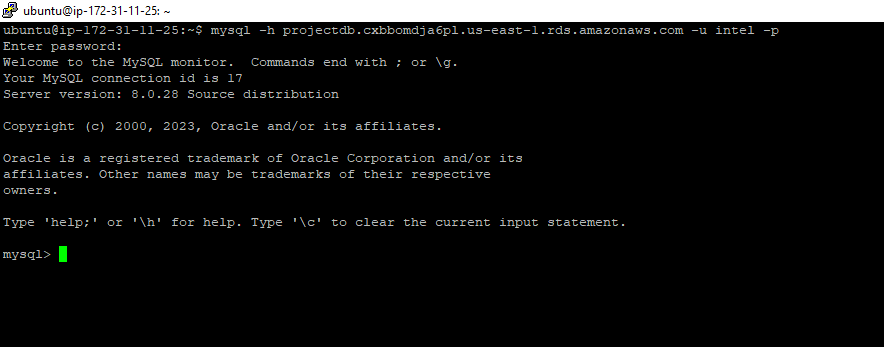


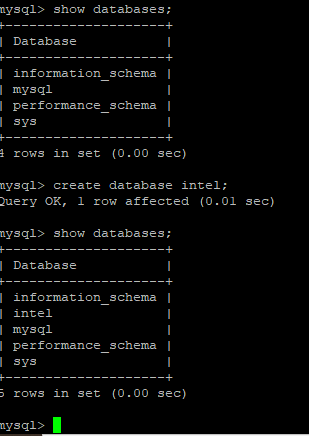


* Install my sql in the instance “sudo apt install mysql-client-8.0 –y”

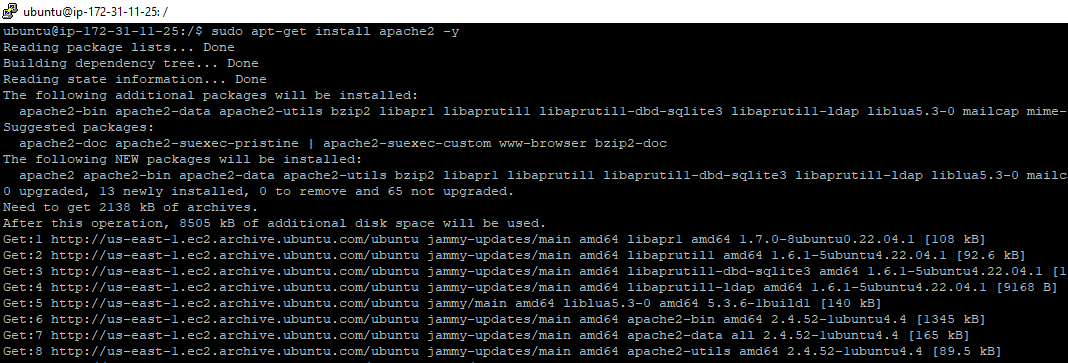


* Connect to the DB using endpoint

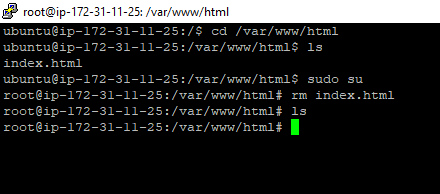




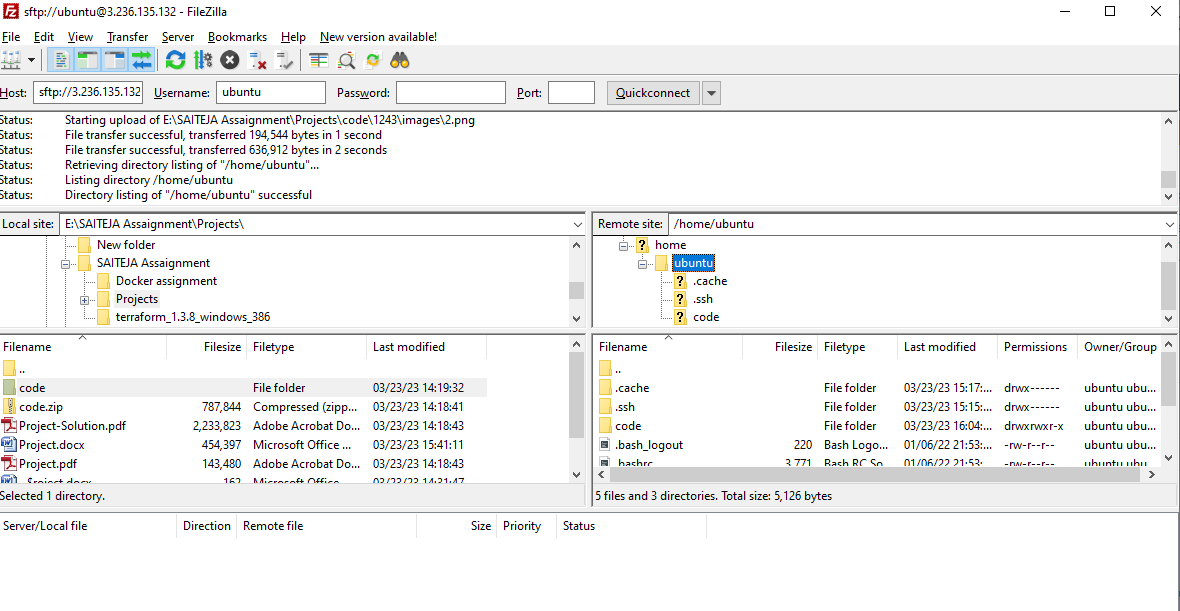
* Install apache2 in the instance



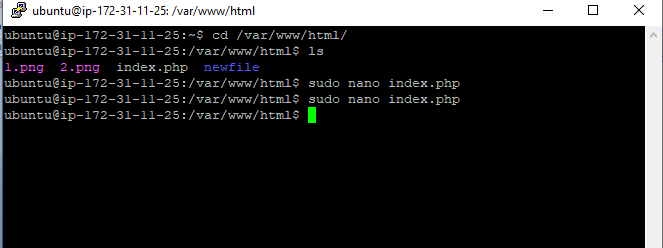
* Go to “/var/www/html “
* And remove index.html

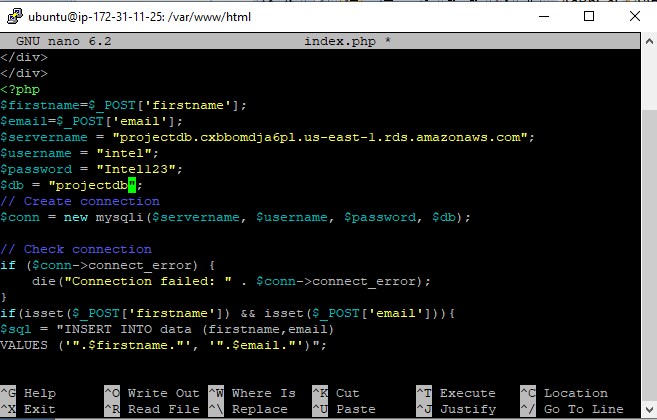


* Use Filezilla to transfer the file from local to the instance

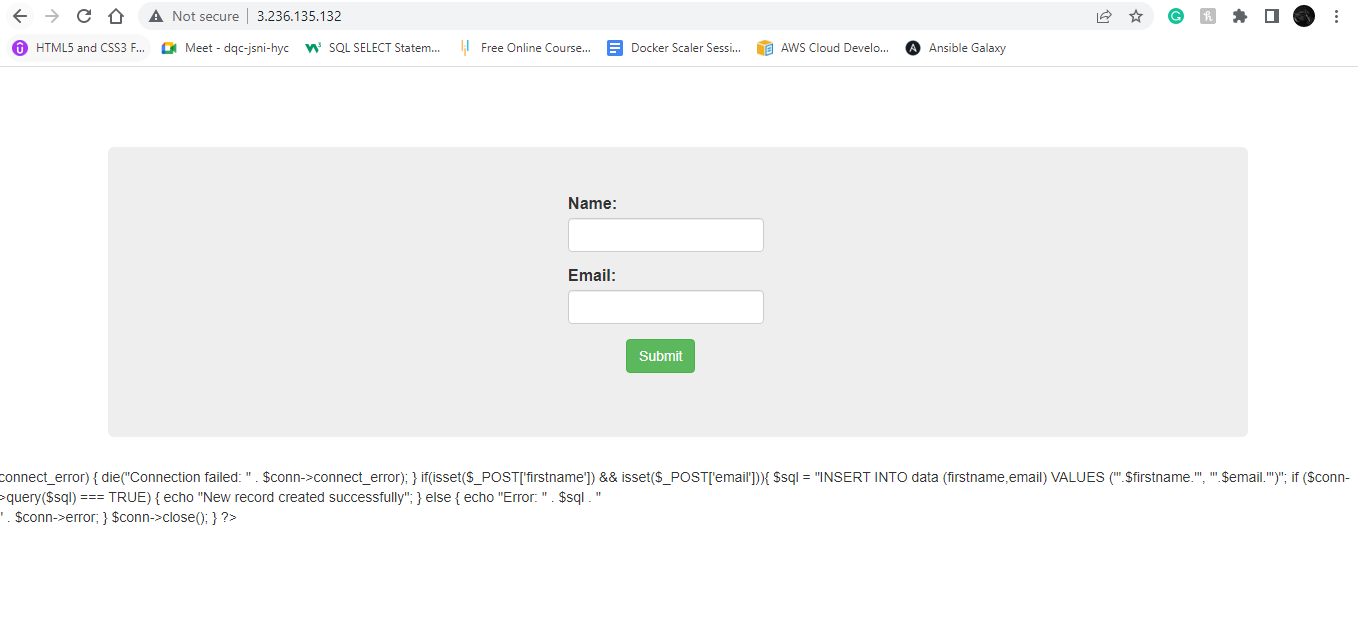


* Copy all the file to “var/www/html”
* And edit the PHP file for MYSQL credentials

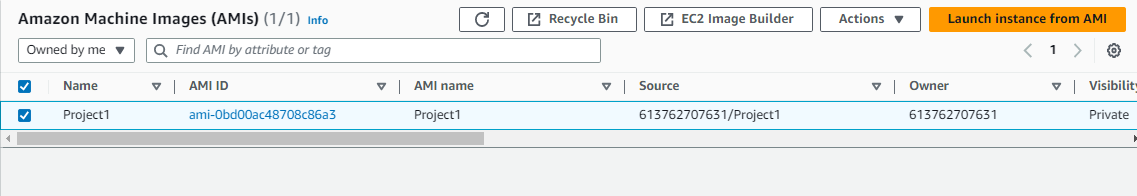




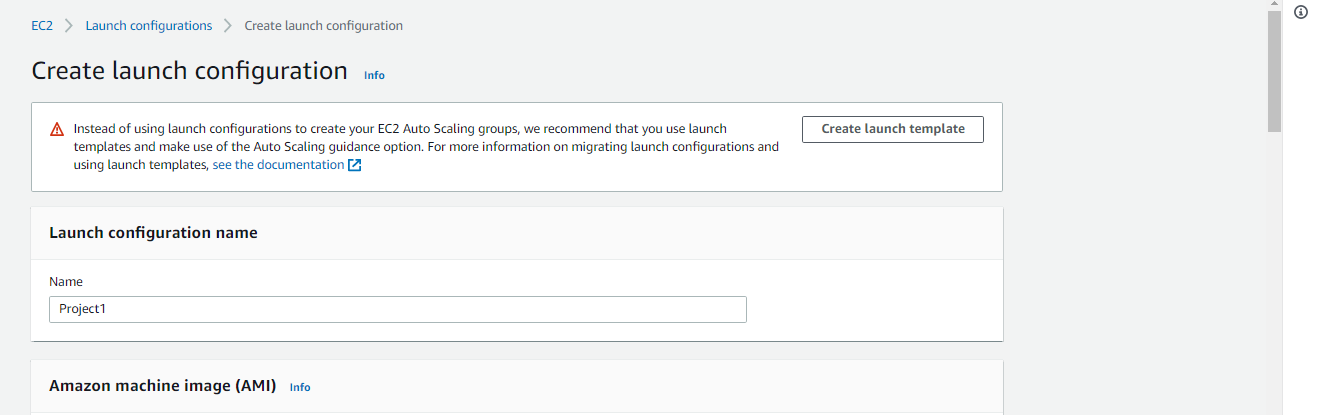
* Copy the instance address and cheack



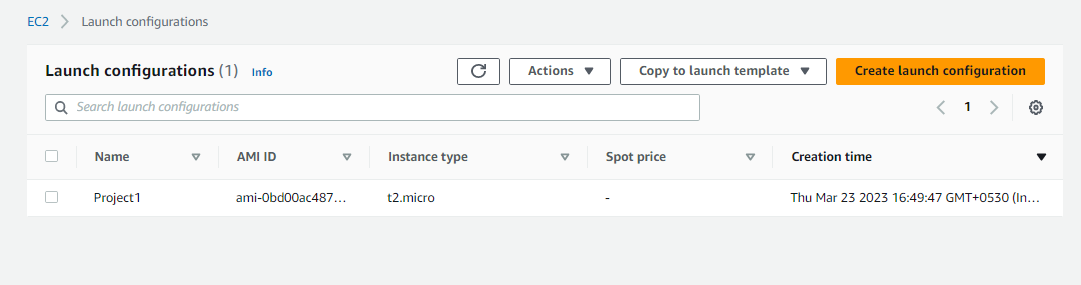
* Now in the EC2 console Create an image to configure the auto scaling group



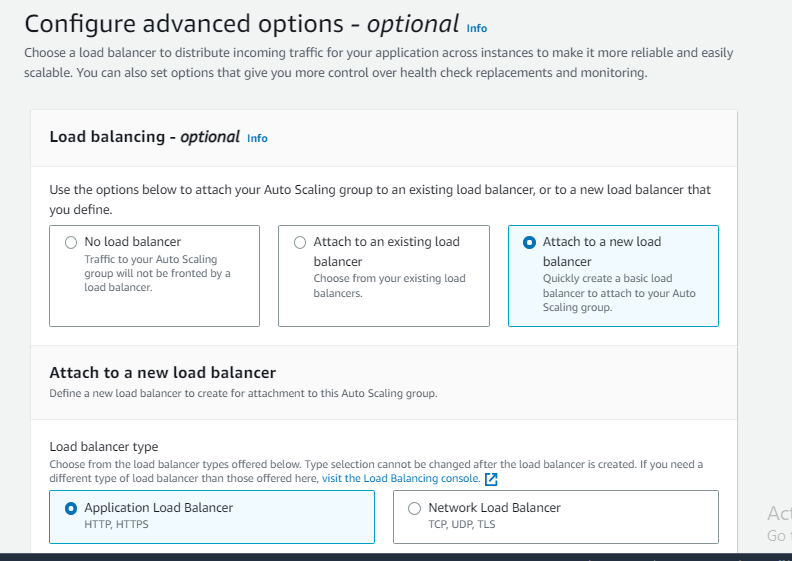
* Go to launch configuration and create the launch configuration using the AMI

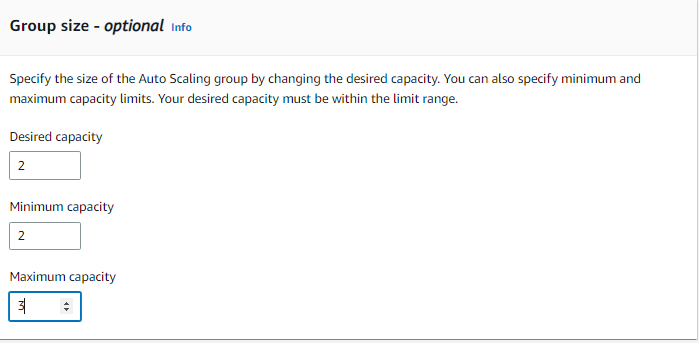


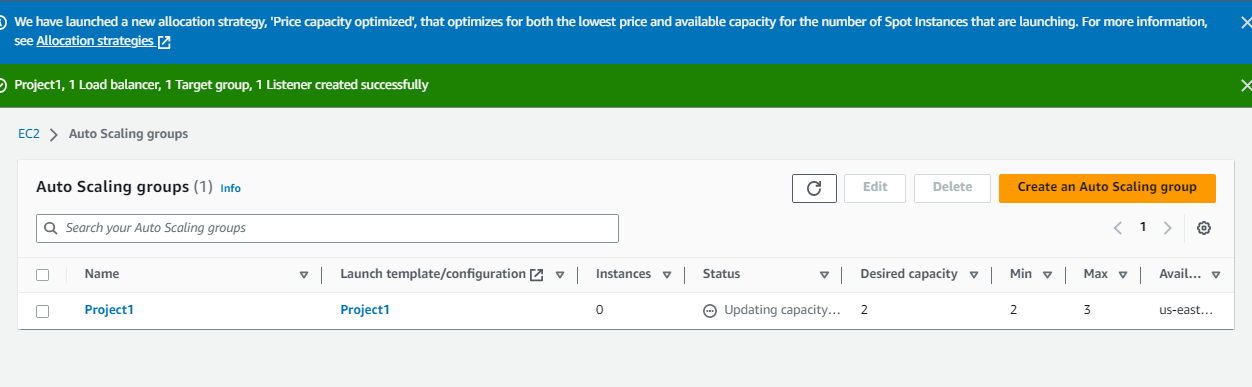
* With this launch configuration create autoscaling group

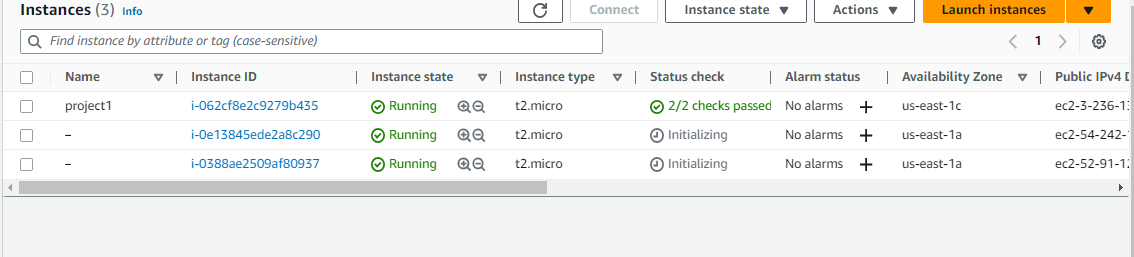


* Also create a load balancer









* We can see the instances that are created
* We can use Route 53 for load balancer DNS name and change the host name.
* I was unable to get the DNS name in freenom.