Deployed Highly Available and Scalable Application on EC2

In this project I have hosted one website using autosacling group and loadbalancer.In this project i have used autoscalling group for scaleup and scaledown purpose.

I have attached load balancer to autoscalling group. for the load balancer i have created one security group and one target group. In target group i have configured helthcheck to check the healthy instances.

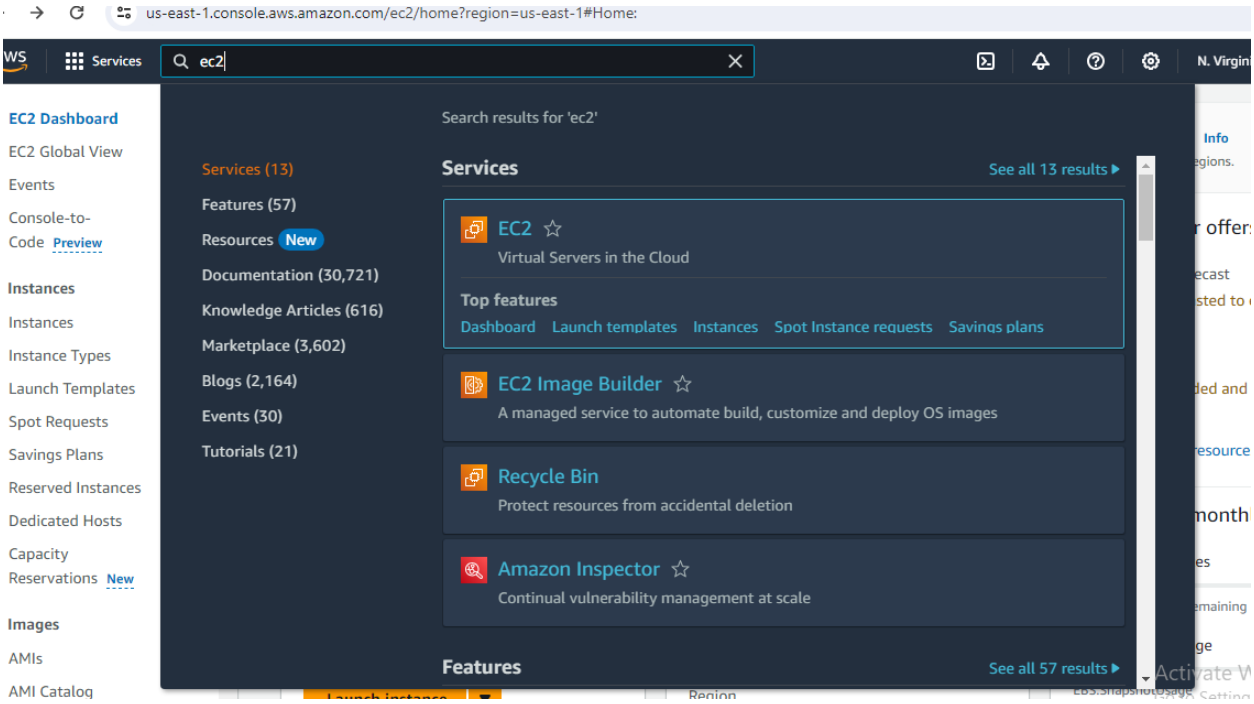
To achive high availablity I have hosted a website in multiple region used load balancer and autoscaling group with target group.

Step 1: Logging In to the Amazon Web Services Console

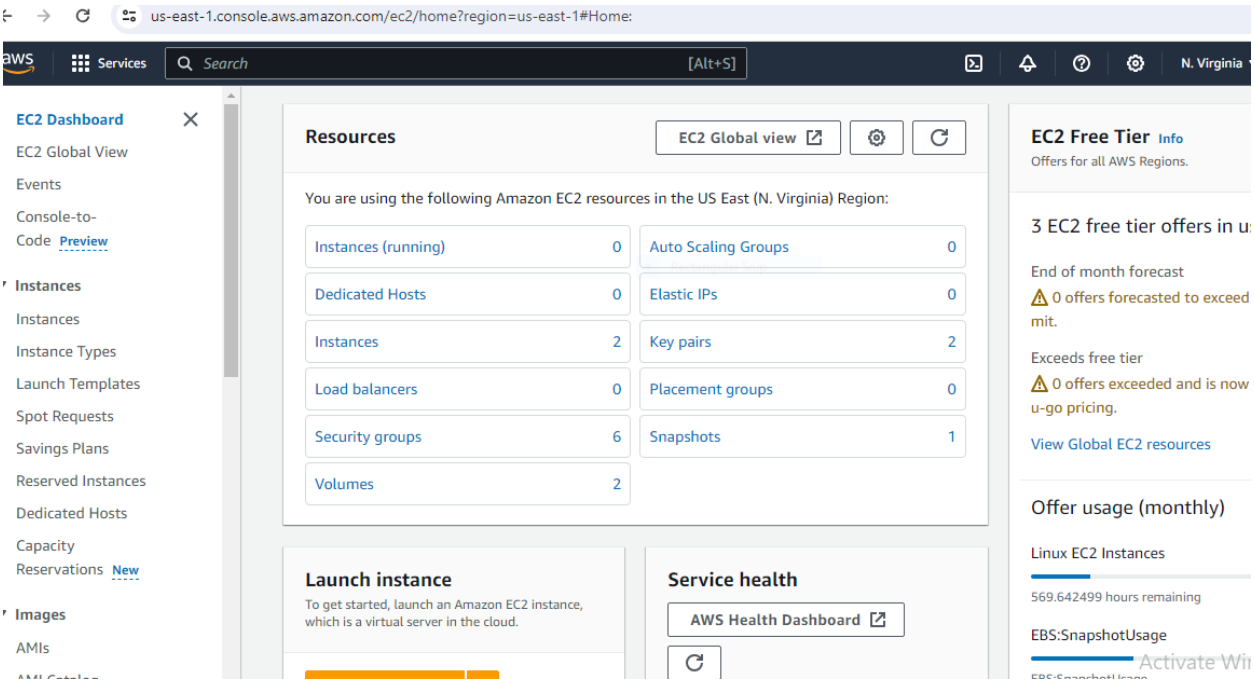
login to your AWS account using your credentials.

Step 2: Create a template

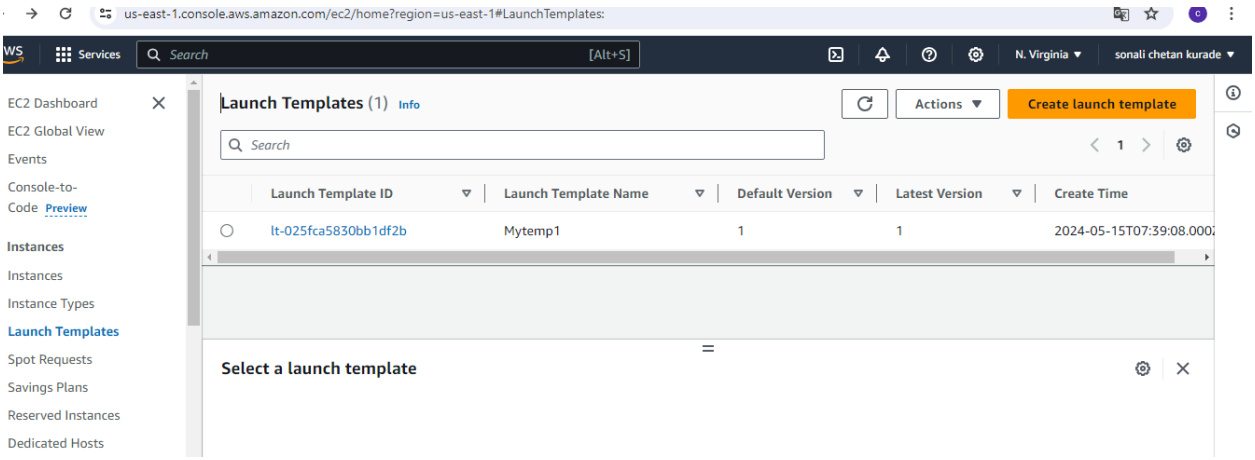
1. In the AWS Management Console search bar, enter EC2, and click the EC2 result under Services:



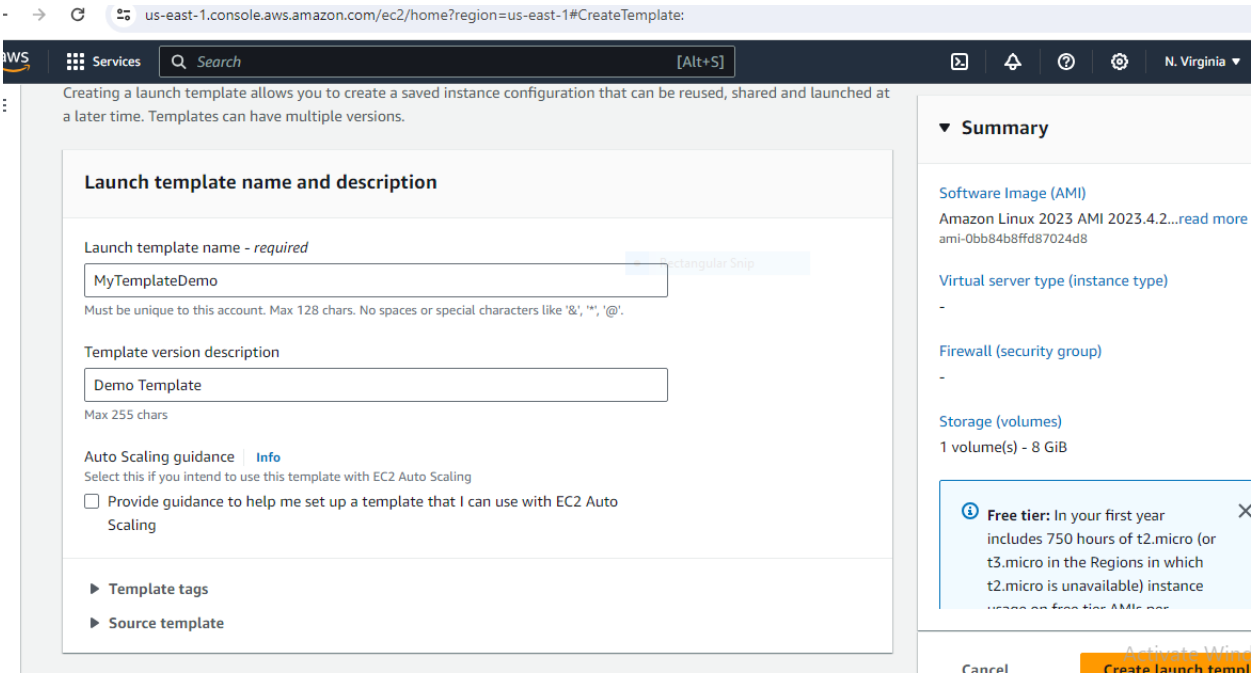
2. Click on launch template , in the left side below the instance

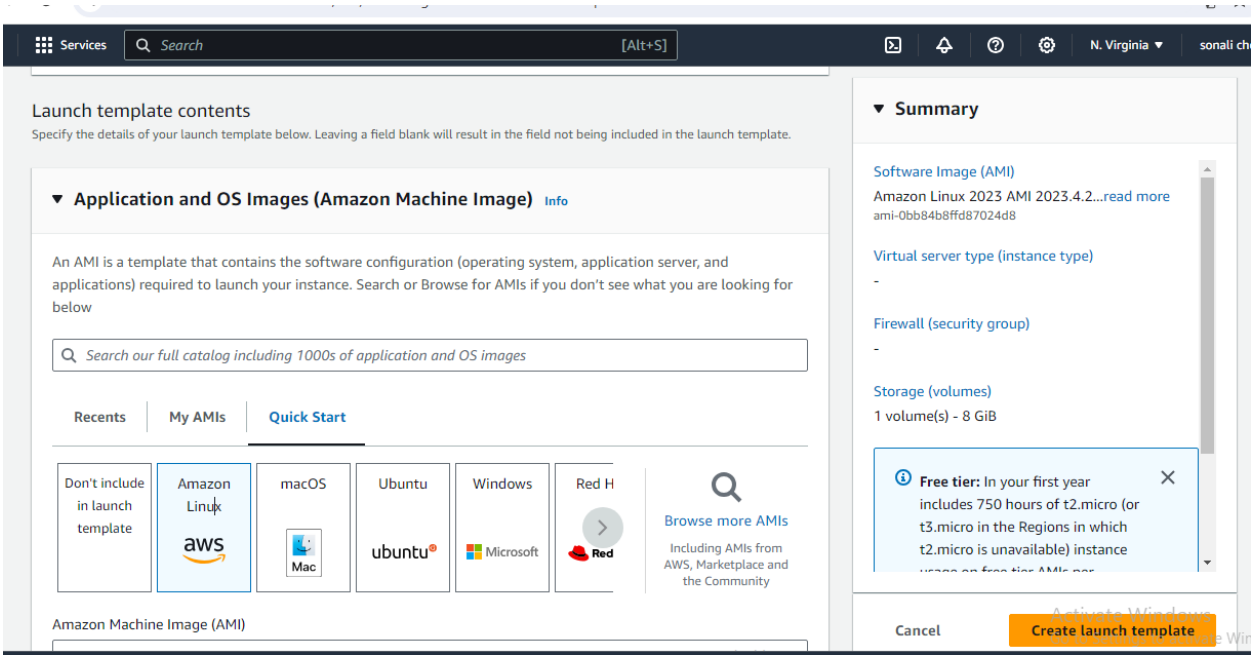


2. To start creating a new template , in the top-right, click Create launch template:



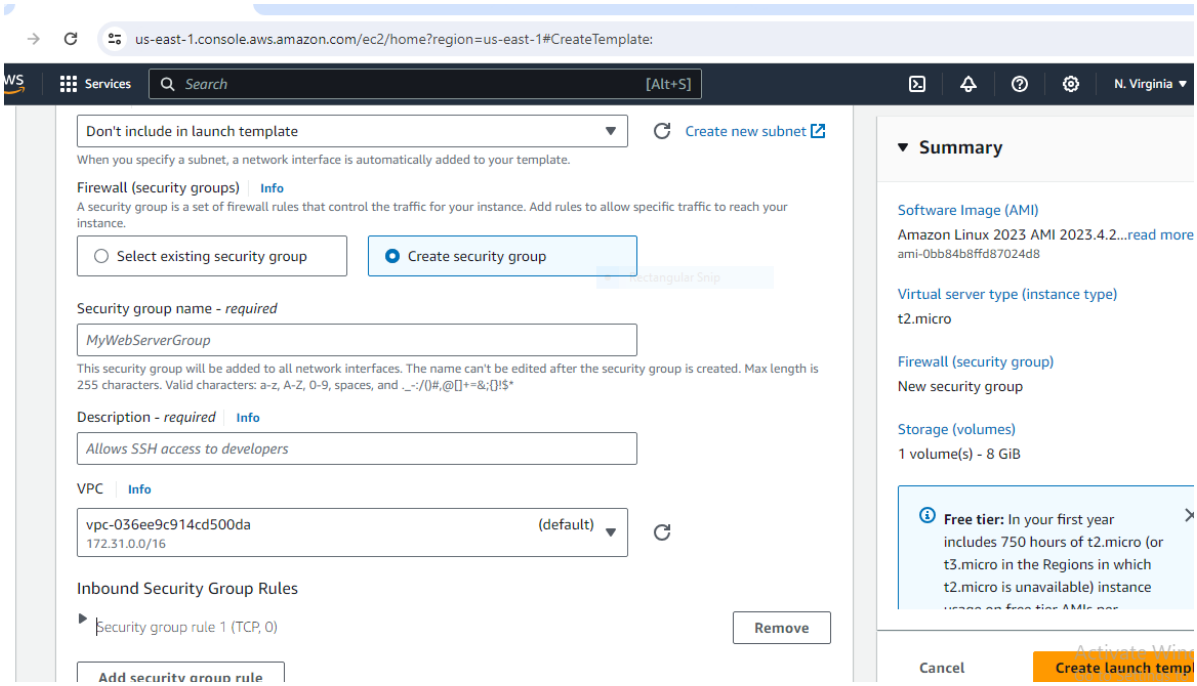

```
4.To create template need to the details
    * Template name
    * Template version description
    * Select the os image
    * Select instance Type
    * Select Key pair
```



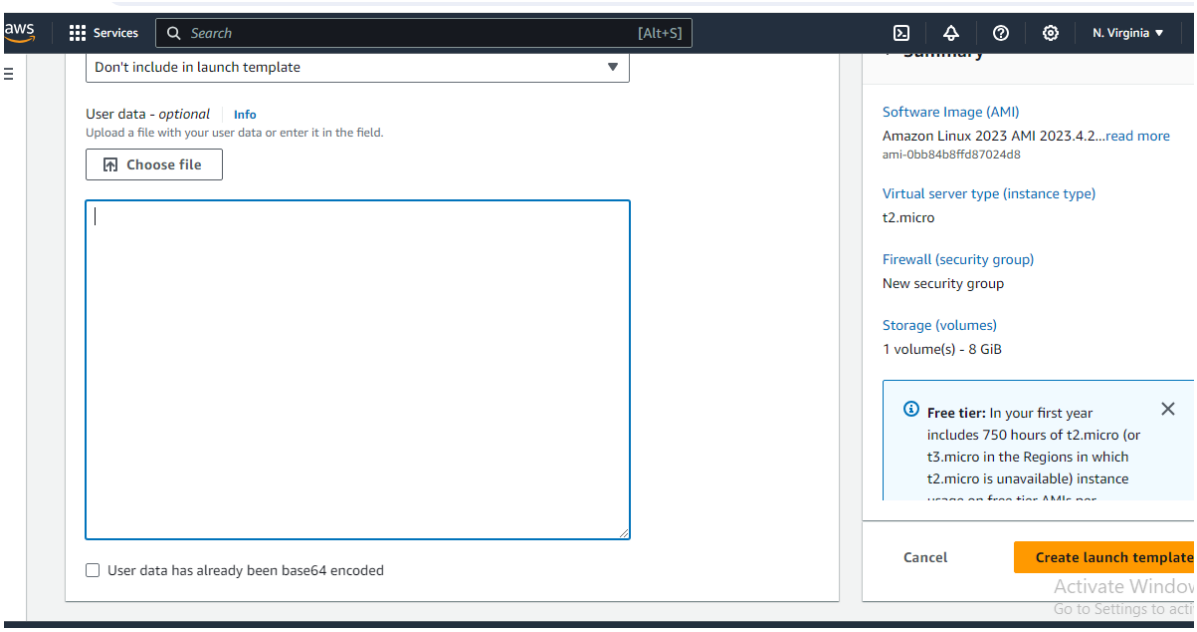


5. Click on Create Security group and create new security group by entering the below details:
    - Security group name
    - Description

- **Inbound Security Group Rules**
    - Enter Source type and CIDR Range



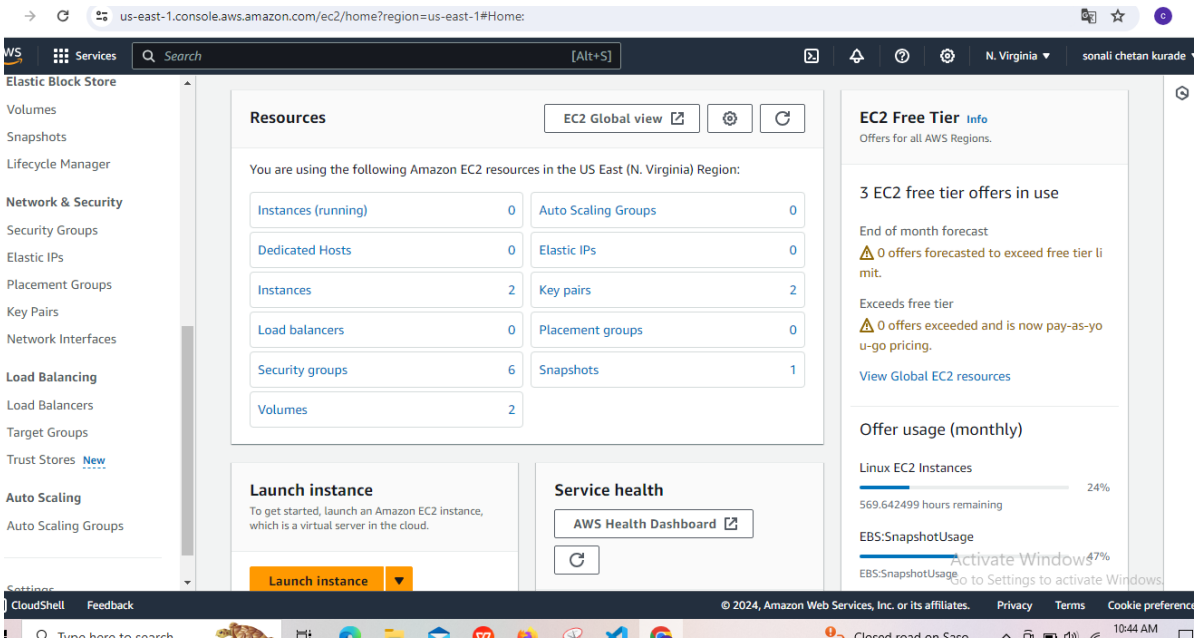
6. Go inside the advance details and write User Data Script



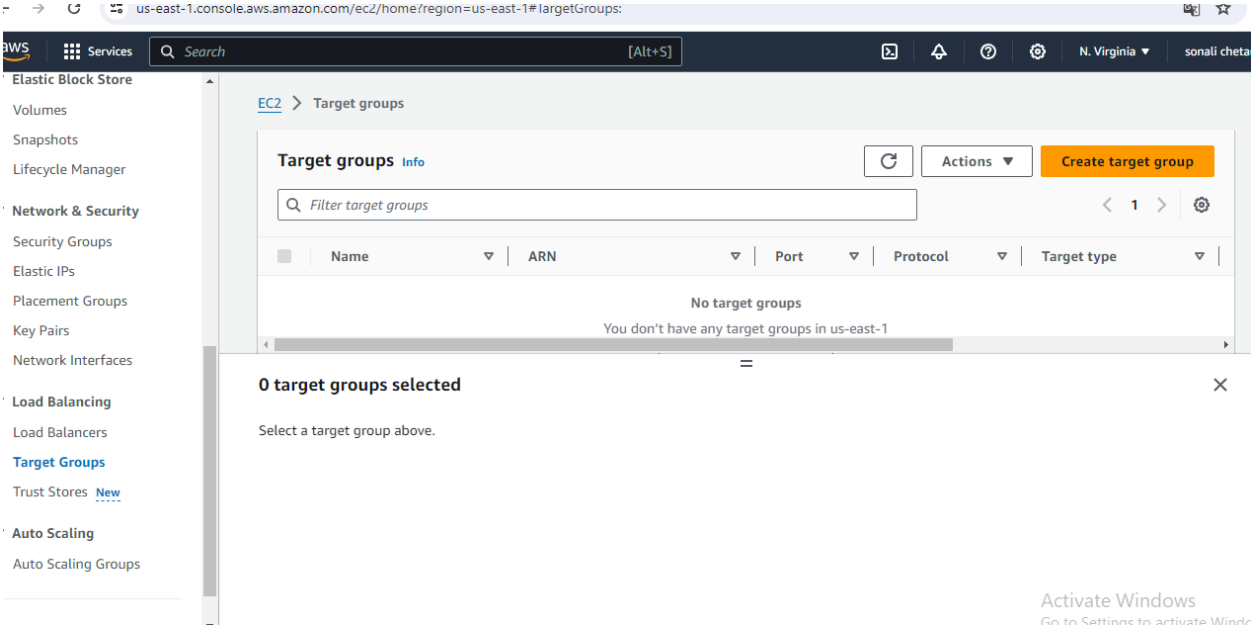
7. click on create launch template and create a template.

Step 3 : Create Target Group

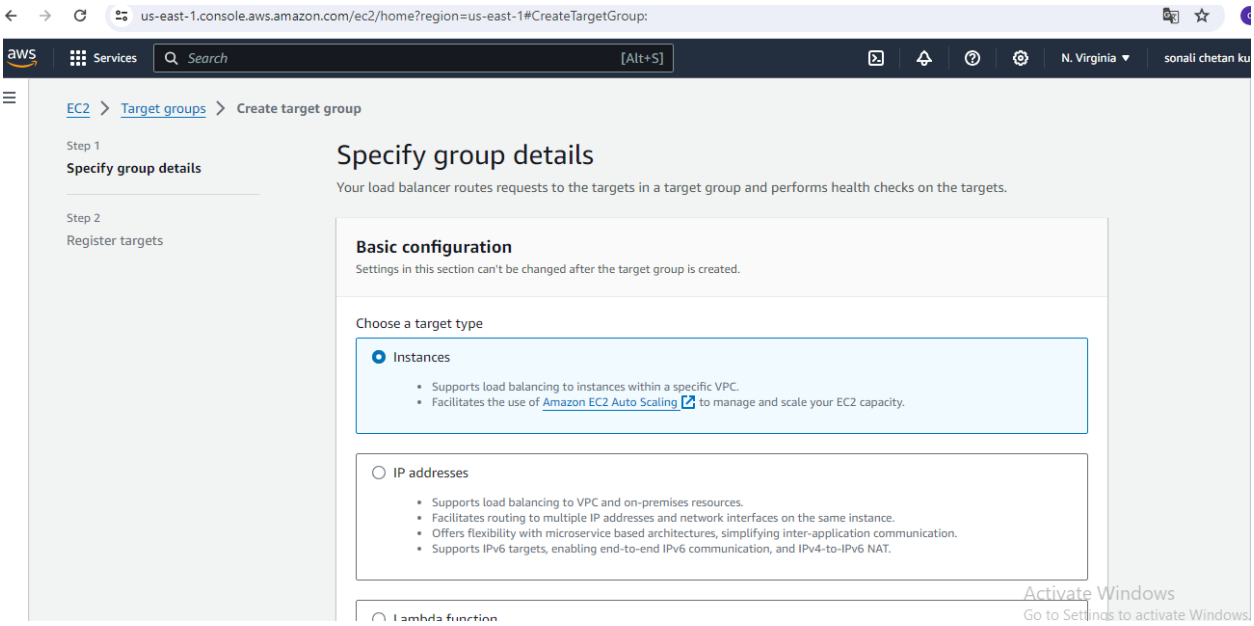
1. Go inside the Load Balancer which is present left down side. Click on Target Group.



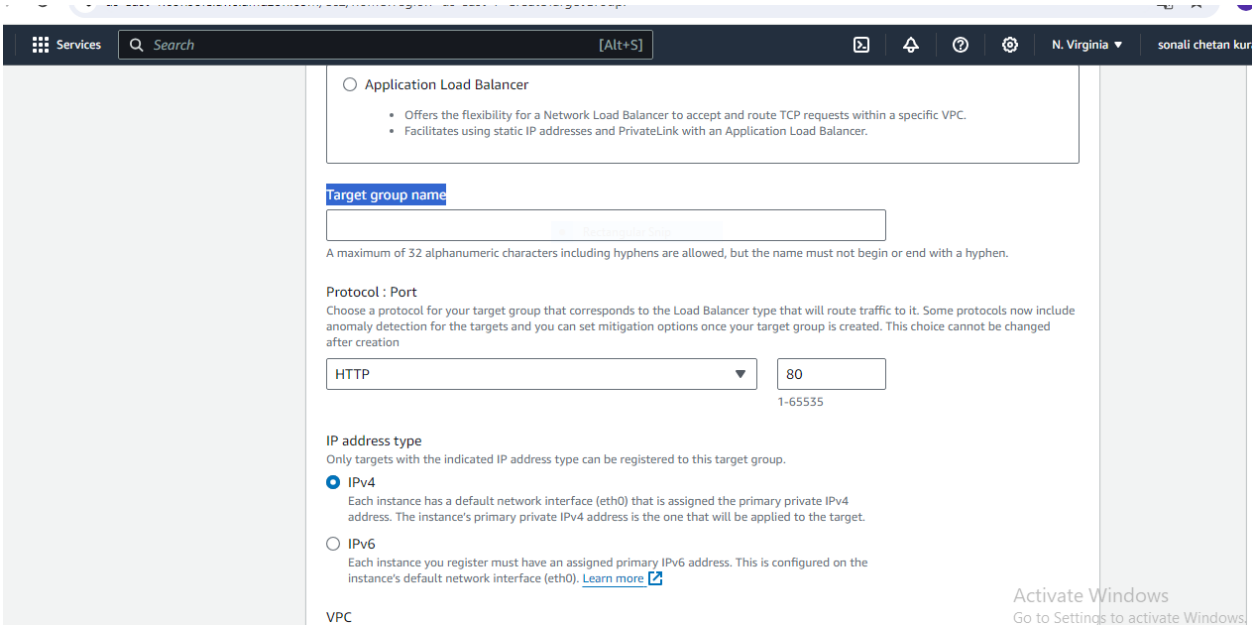
2. Click on create target Group



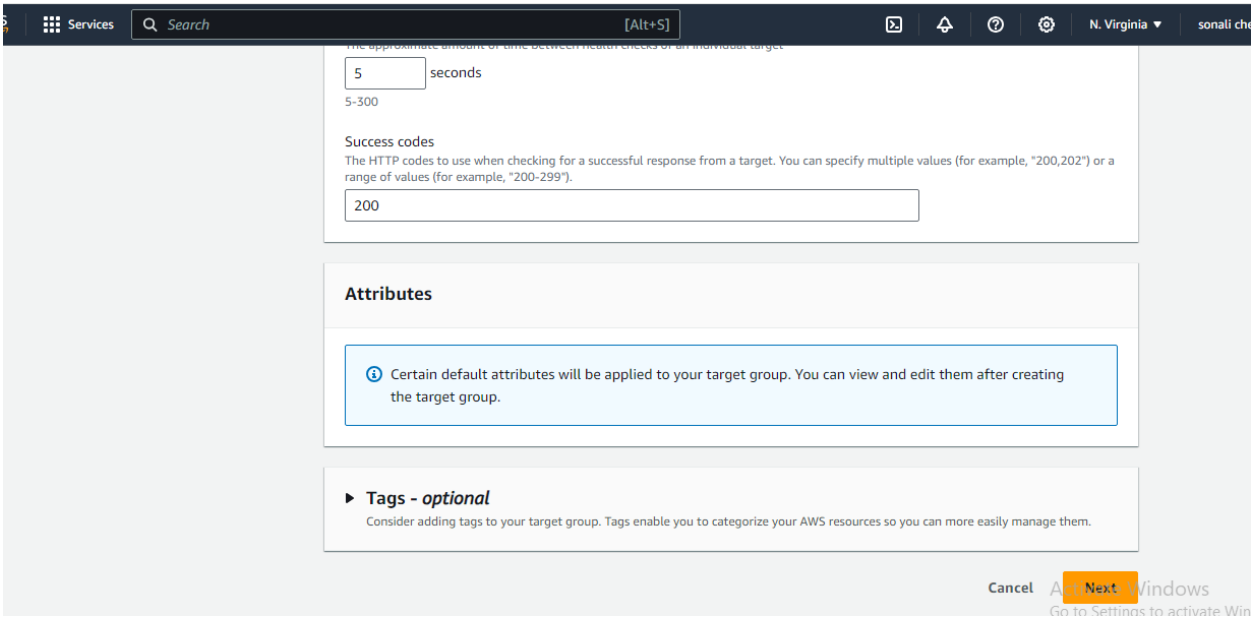
3. Select Instance in Choose a target type



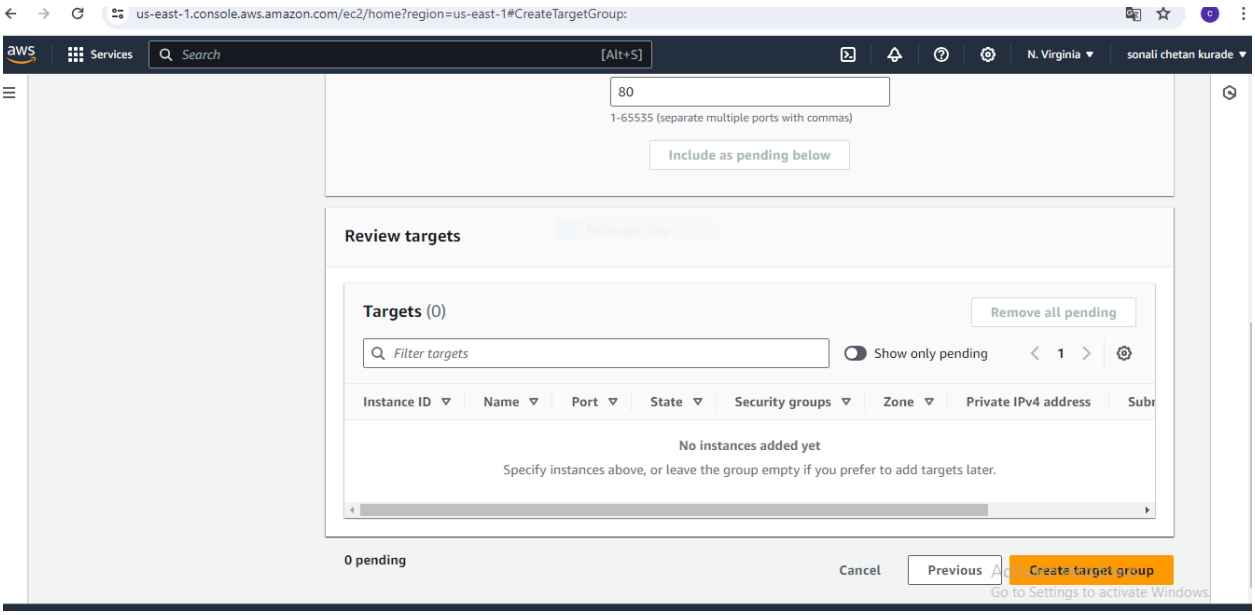
4.Give Name to the Target group name and IP address type



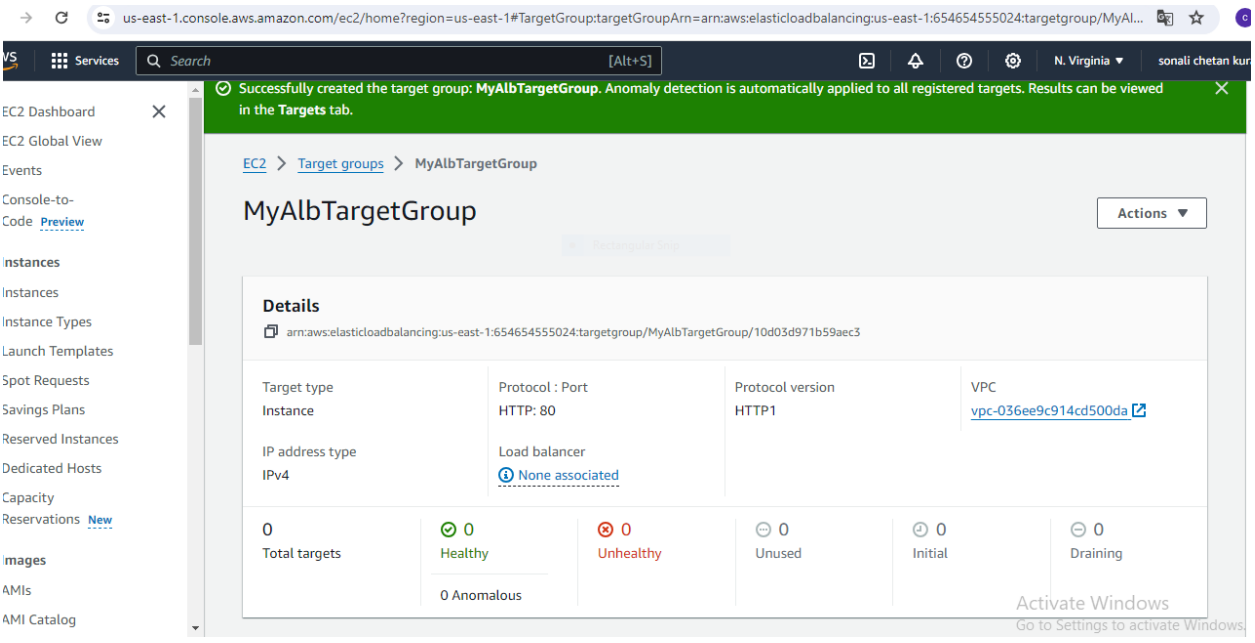
5. Click on next to save all the changes



6. Click on Create Target Group

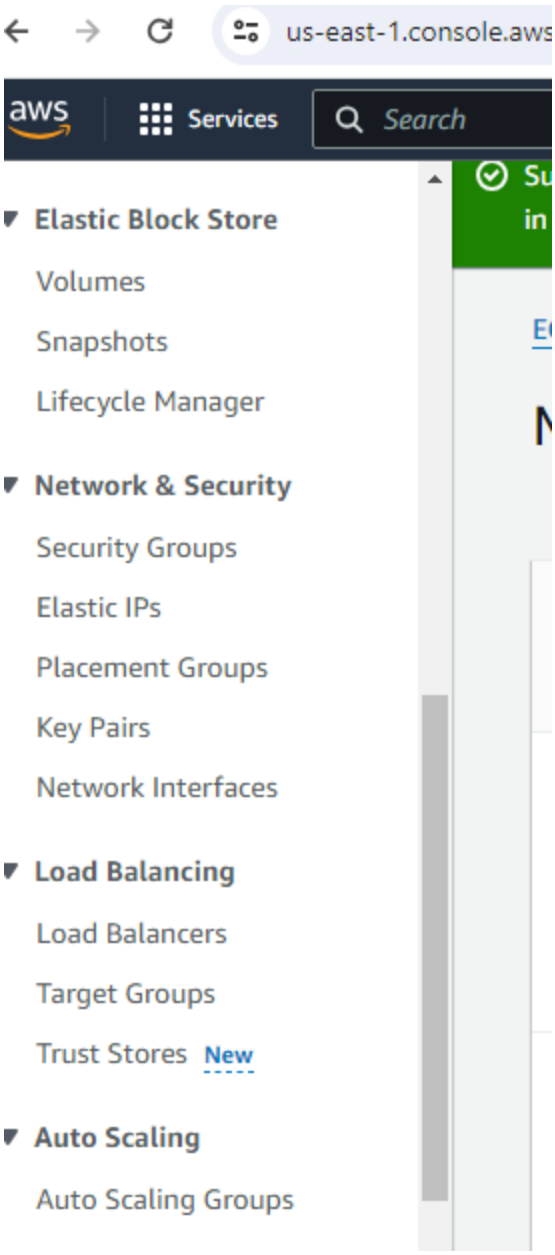


7. Your Target Group is redy

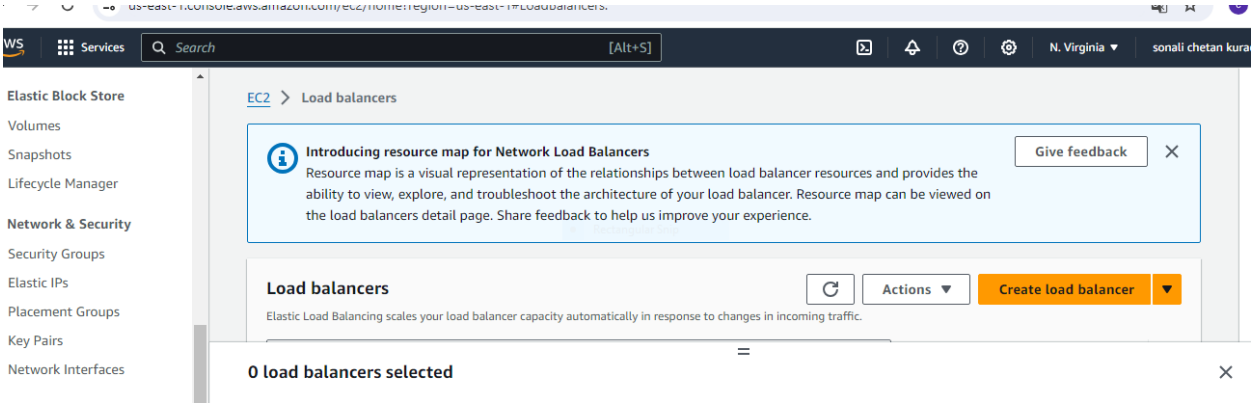


Step 4 : To Create Load Balancer

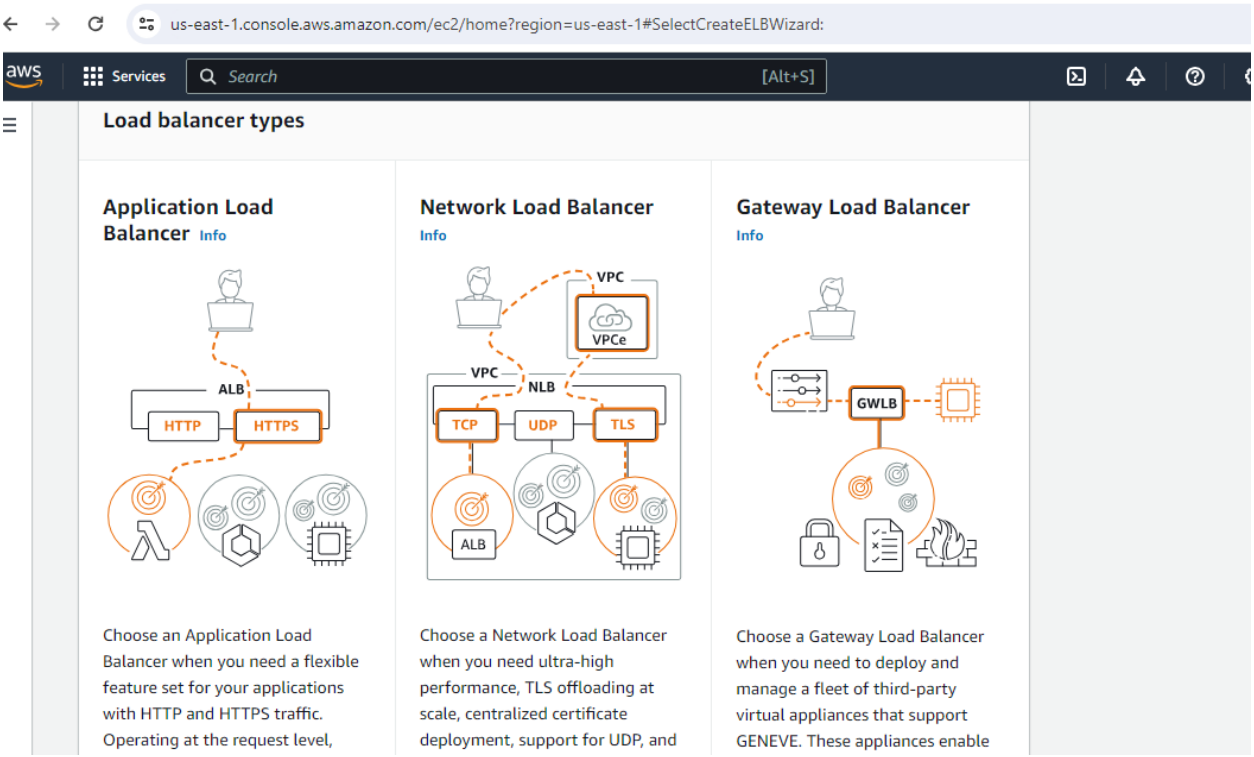
1. Go inside the Load Balancer which is present left down side. Click on Load Balancers.



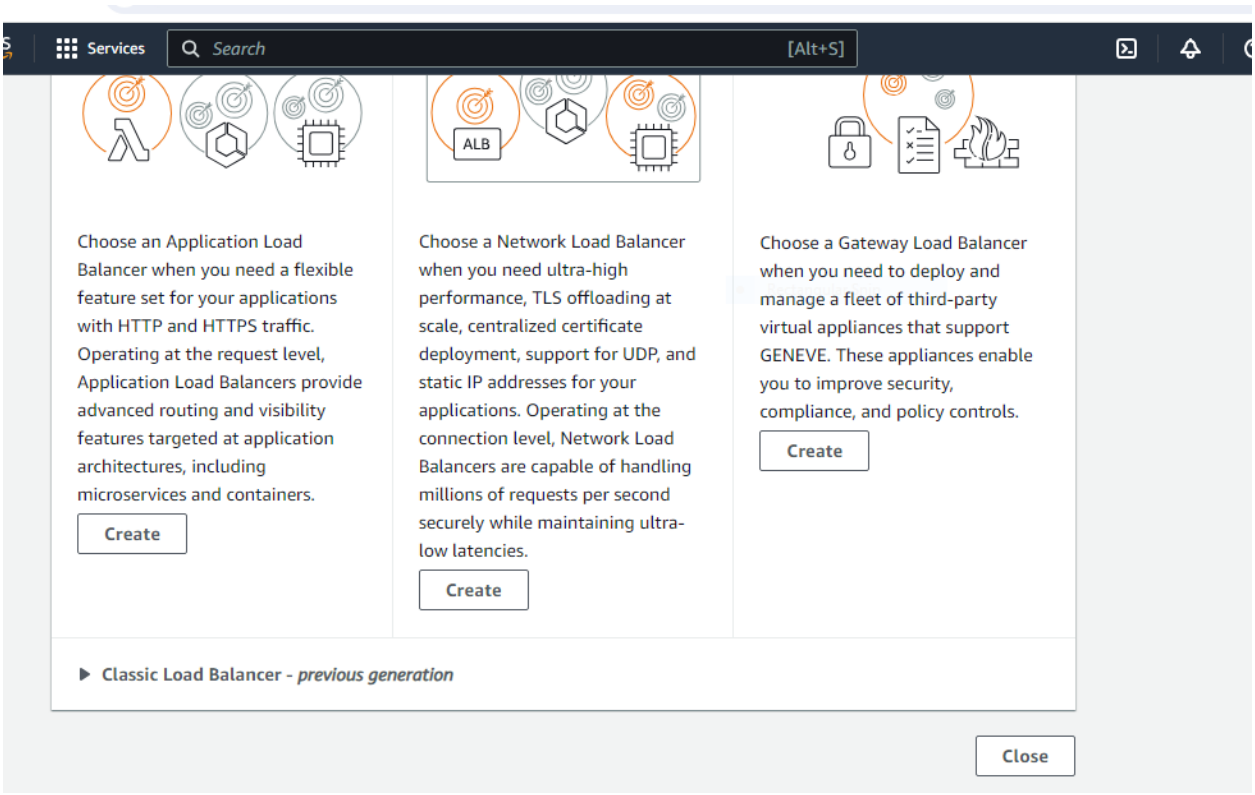
2. Click on create Load Balancer



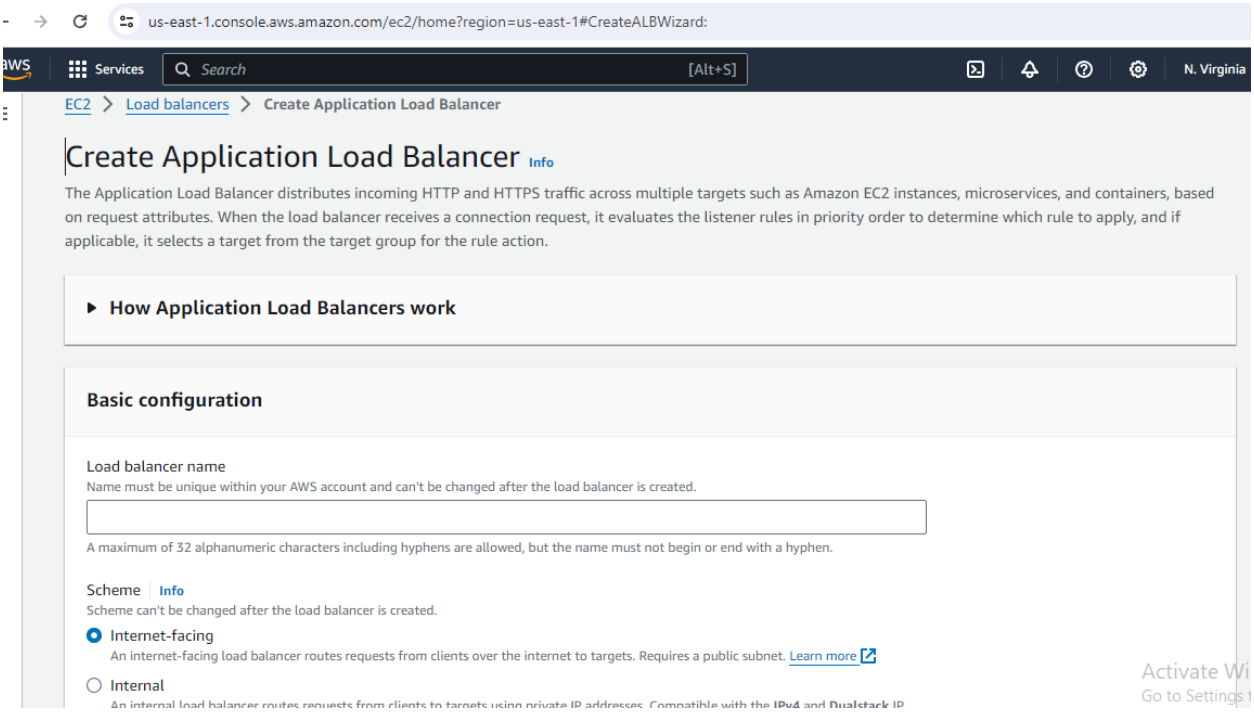
3. Select the type of Load Balancer Which you are Going to create depending on your requirement.



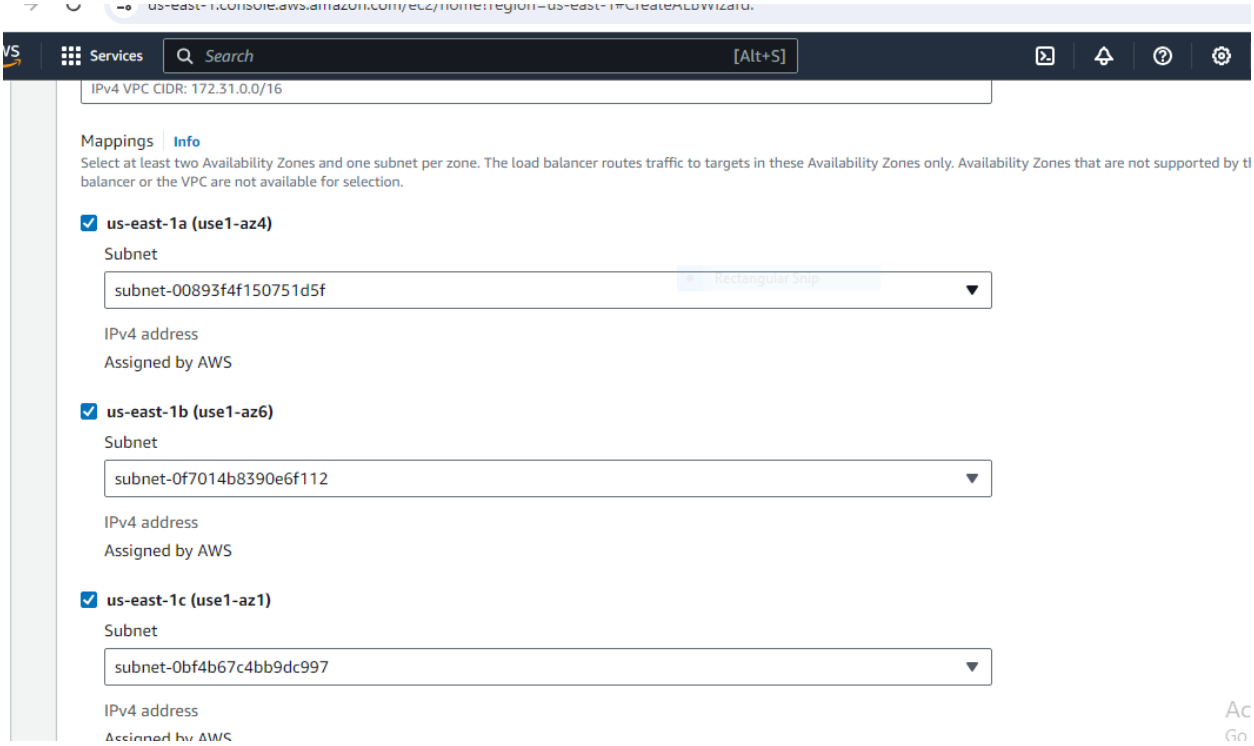
4. Click on Create option to create a Load Balancer



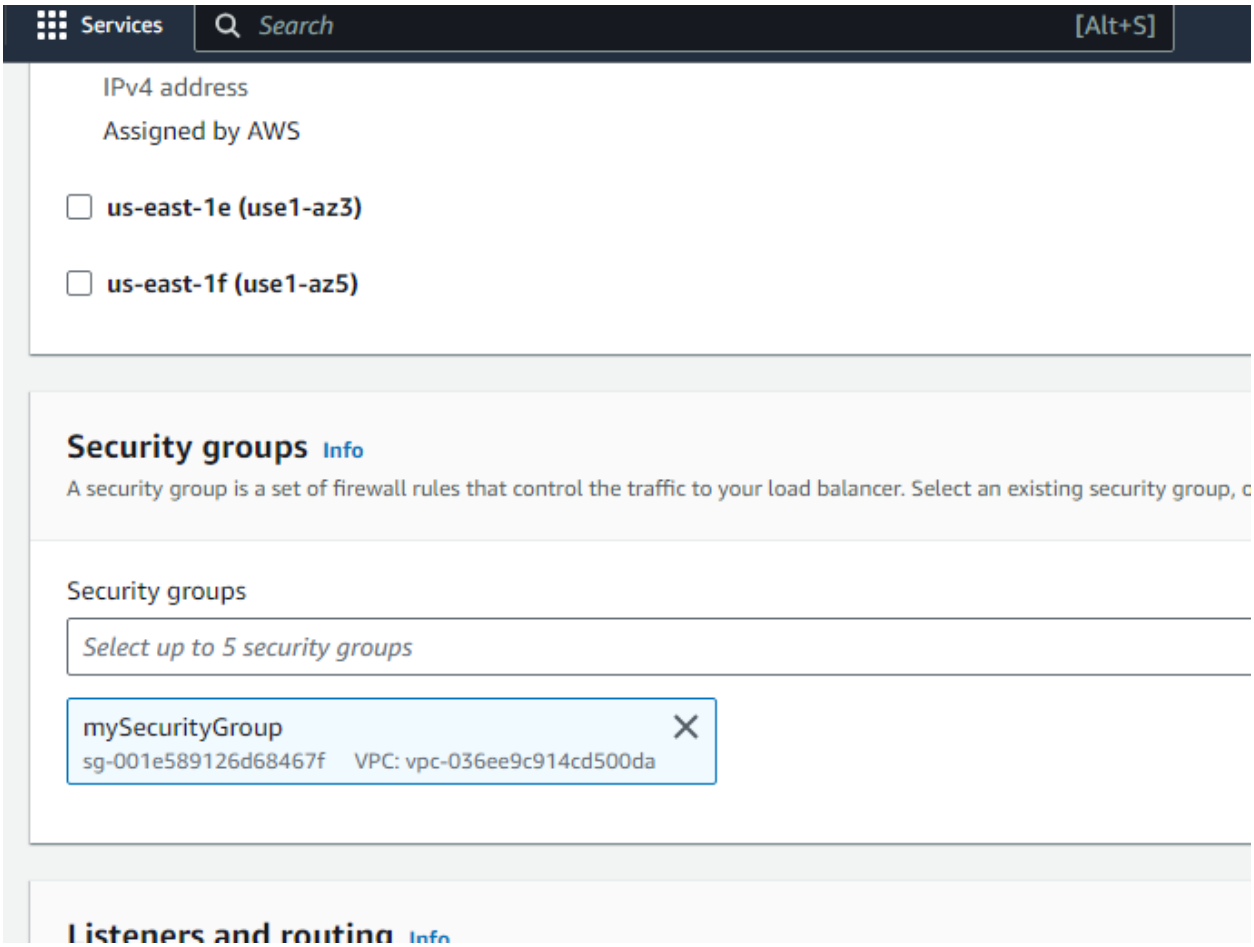
5. Give the name for that Load Balancer. Select “Scheme” as Internet-facing for public data



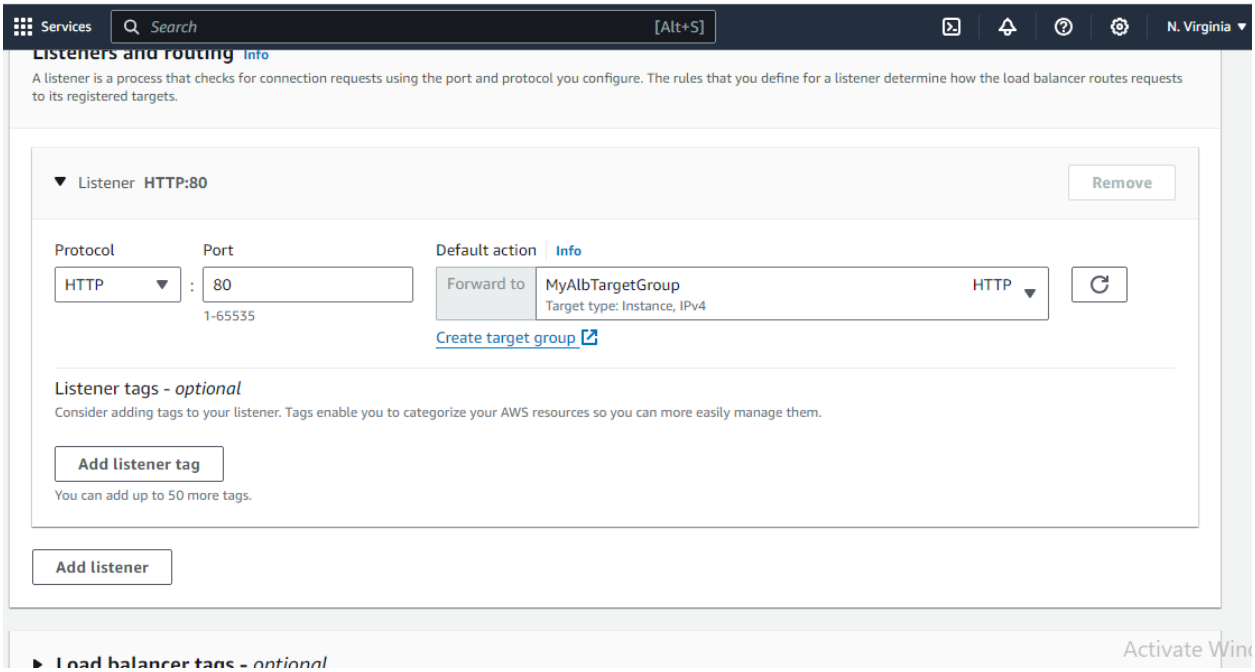
6. Select 3-4 Availability Zone For High Availability



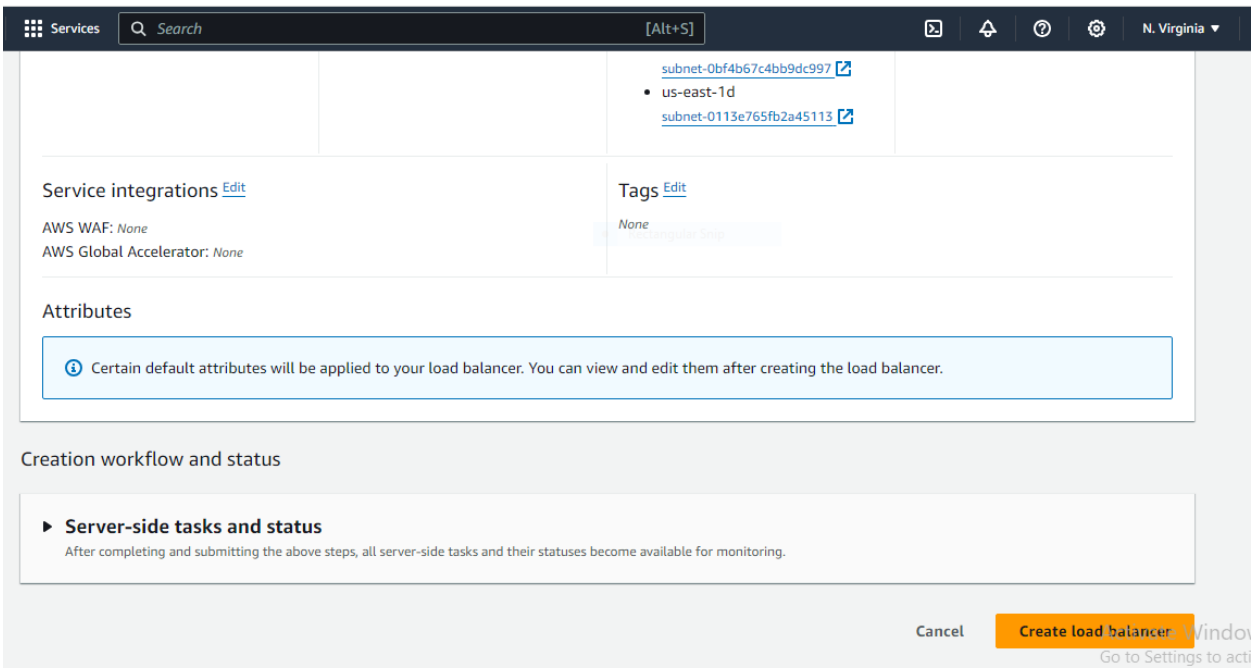
7. Select Security Group Which we have already Created



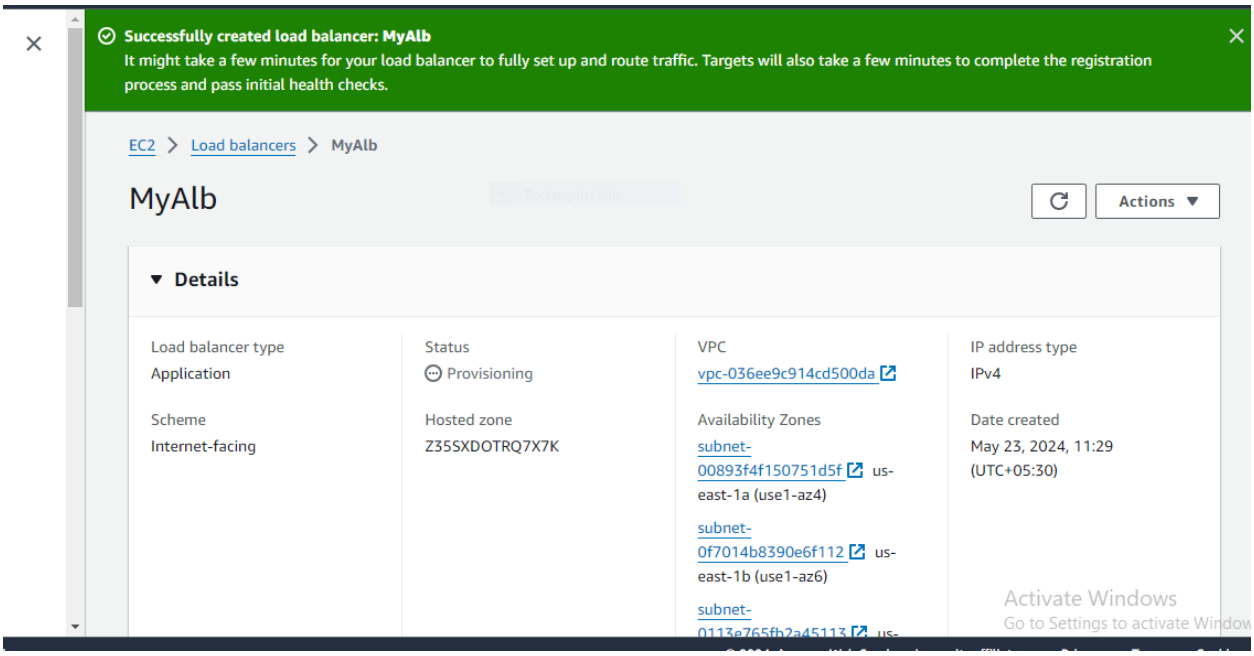
8. Select the target group which we have created. If your Target Group is not ready then you can create here also



9. Go Down and click on create Load Balancer

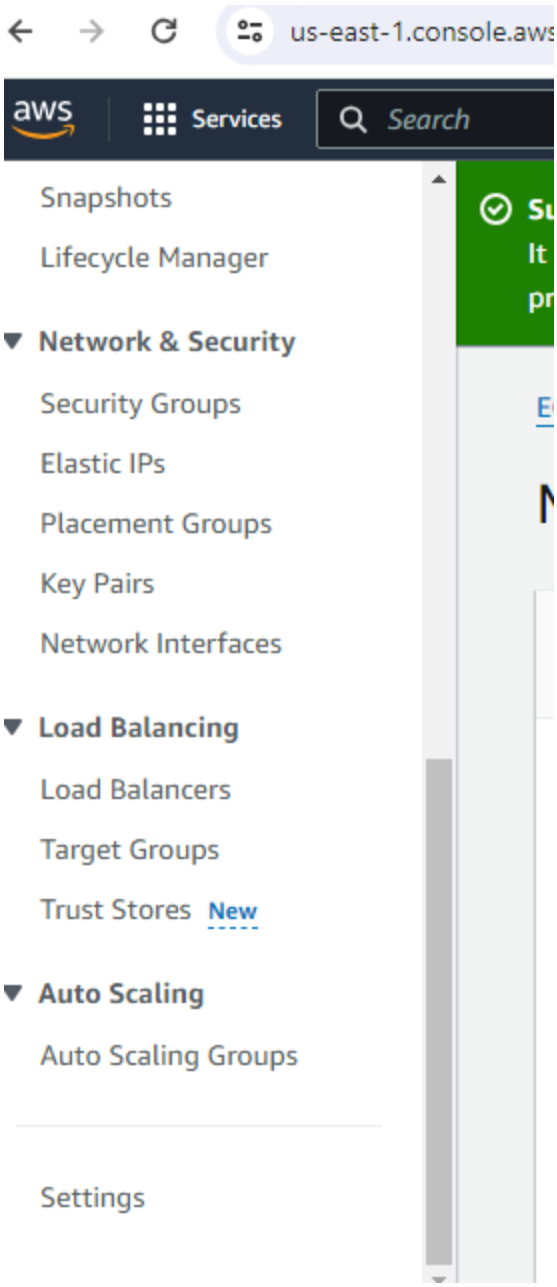


10. Load Balancer is created successfully

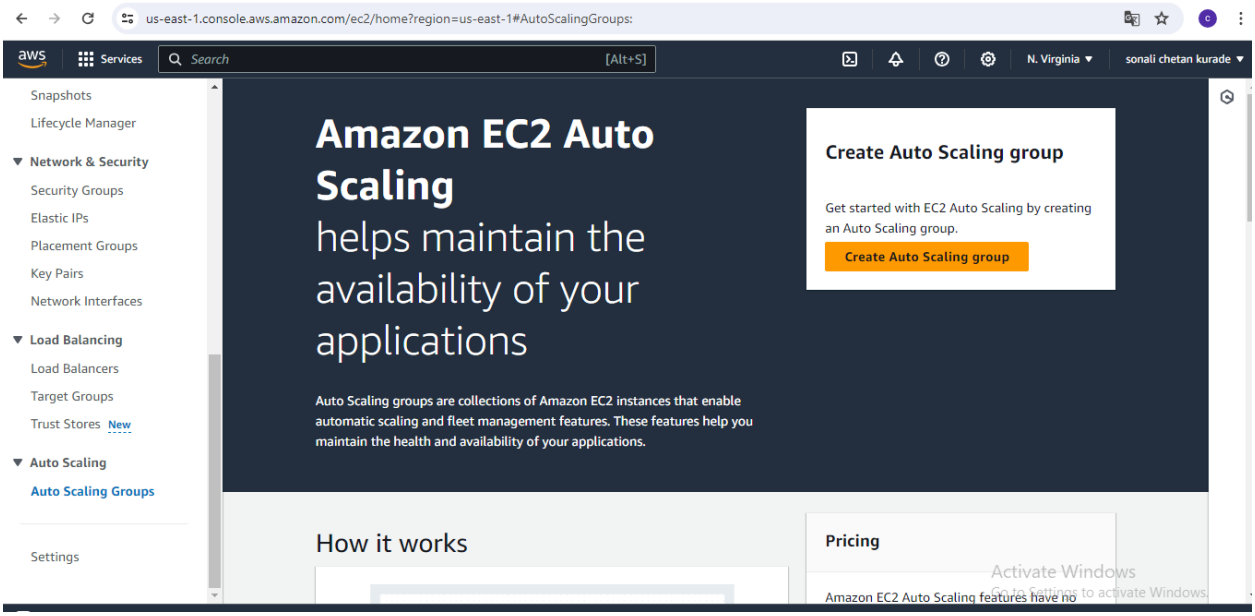


Step 5: Create Autoscaling Group

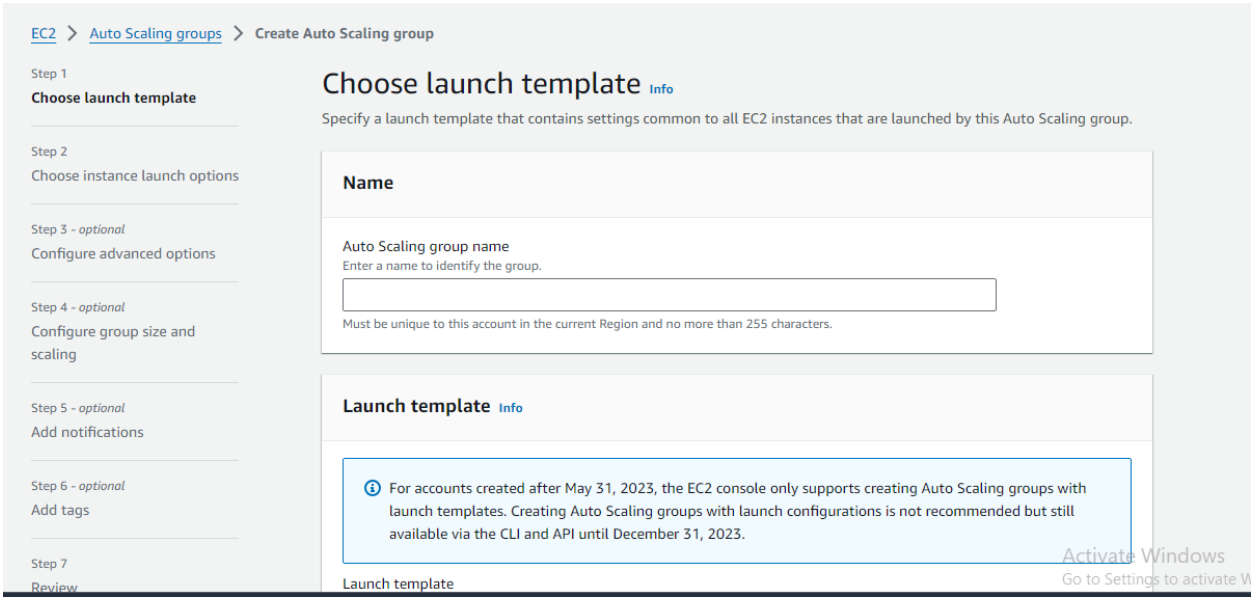
1.Go inside the Auto Scaling which is present left down side. Click on Auto Scaling Group.



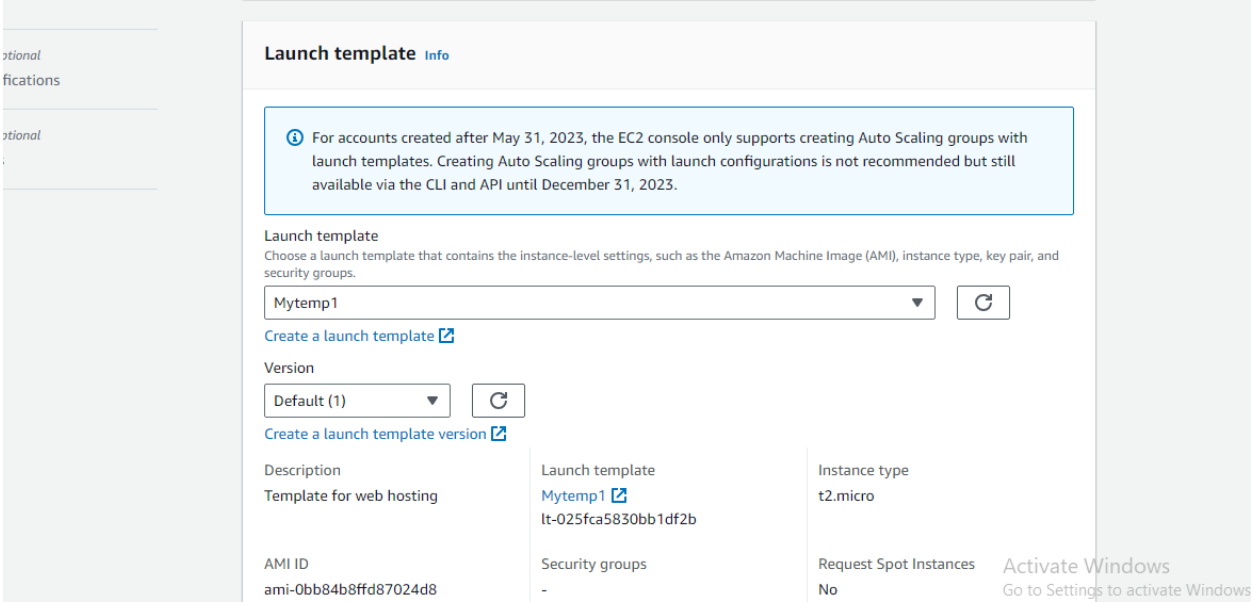
2. Click on Create Auto Scaling Group which is present top right side of the window



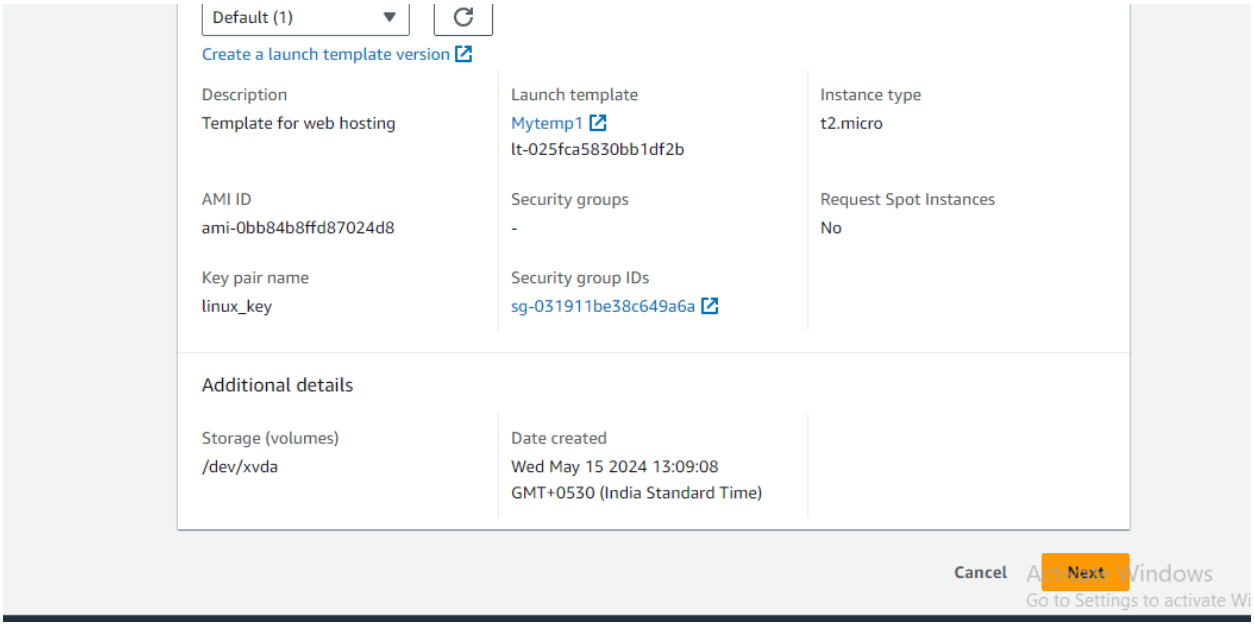
3. Give the name for auto scaling group



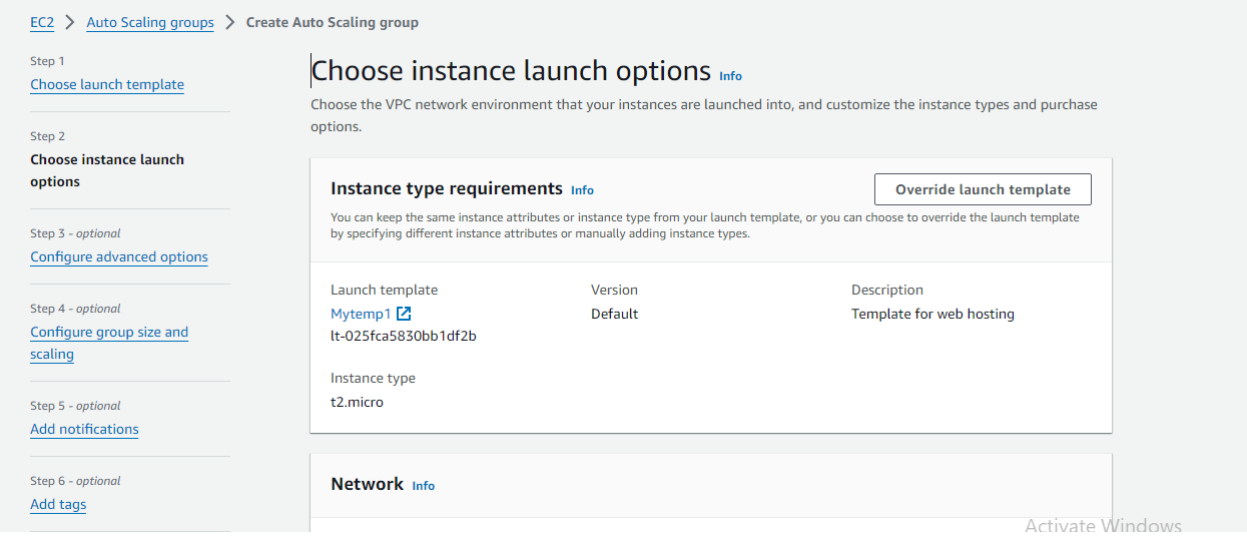
4. Select the launch template which we have already created. If you not created before then you can create here also.



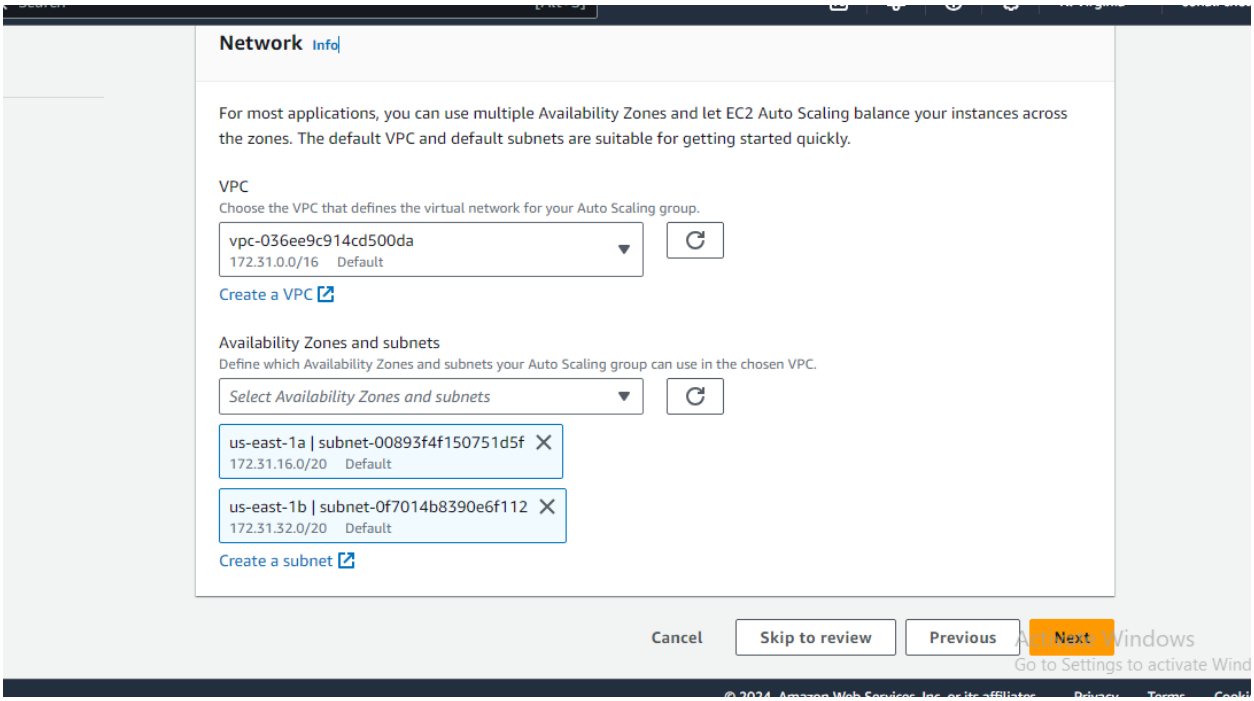
5. Click on next



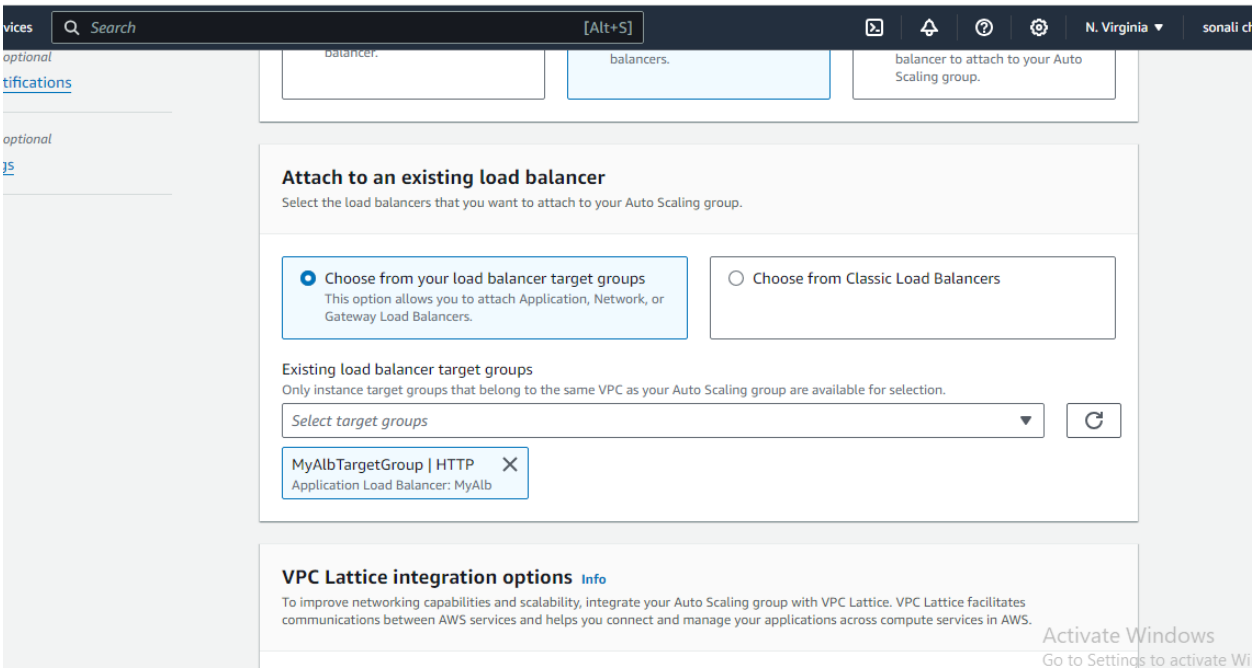
6. If you want overwrite something change something that you can do here



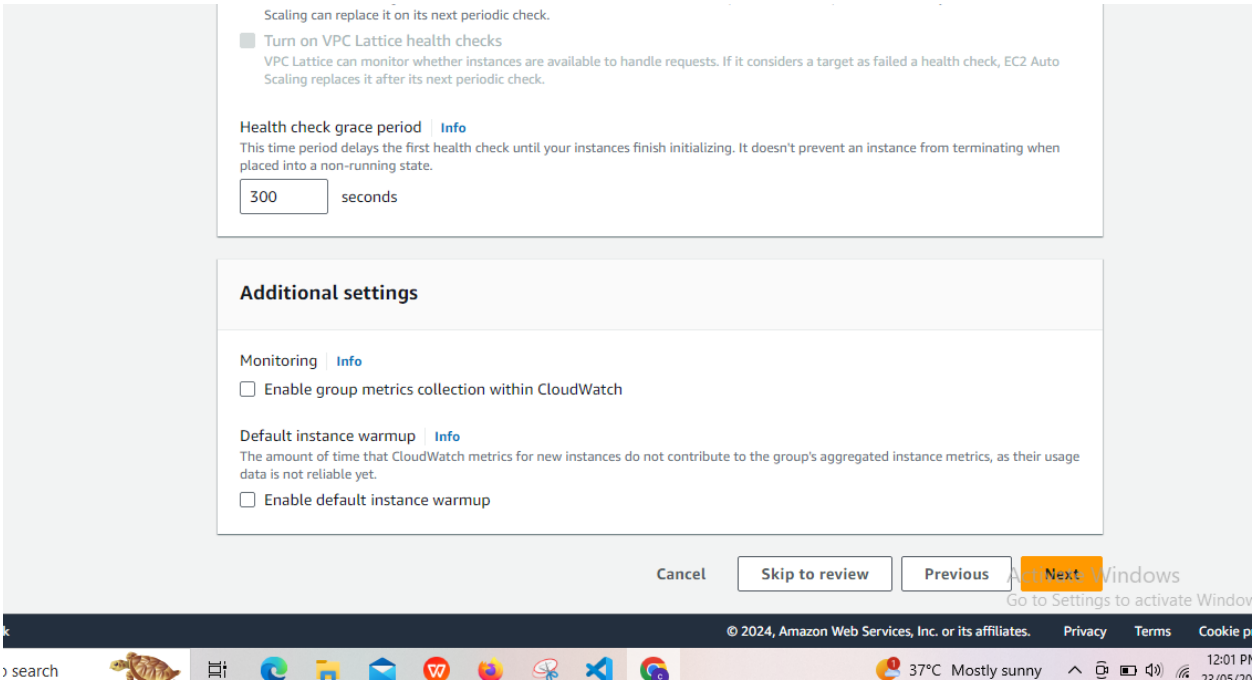
7. Select the availability Zone and click on next



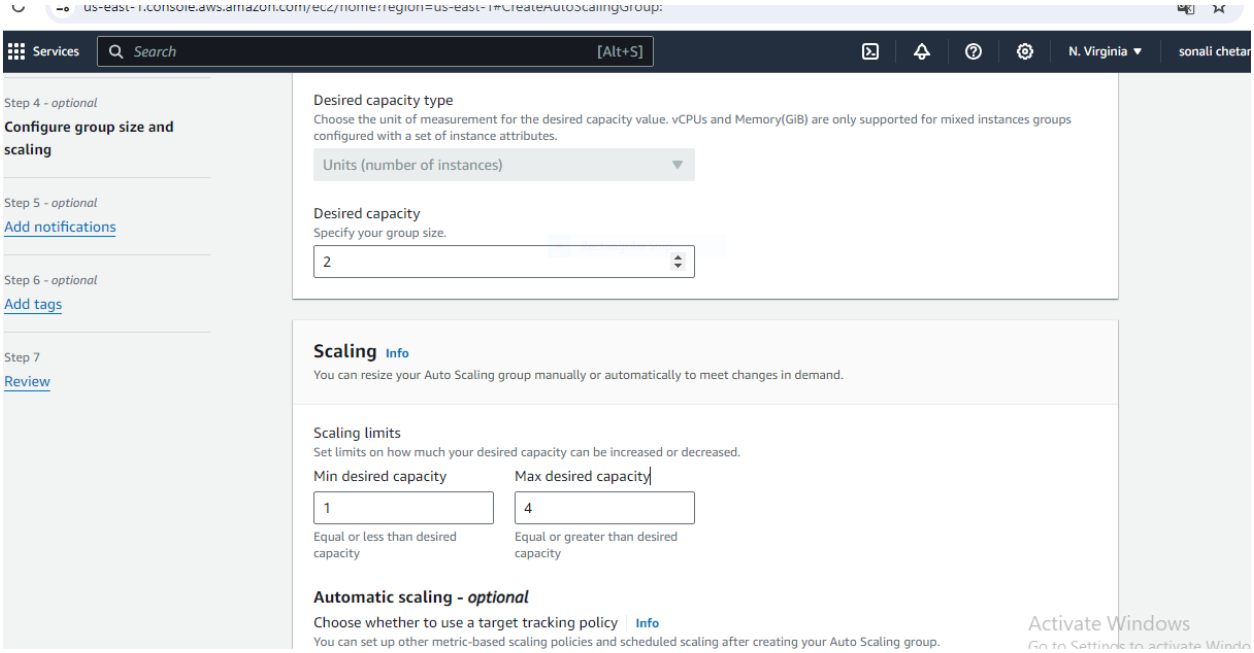
8. Select an option that is Attach to an existing load balancer. Because we have created a load balancer.



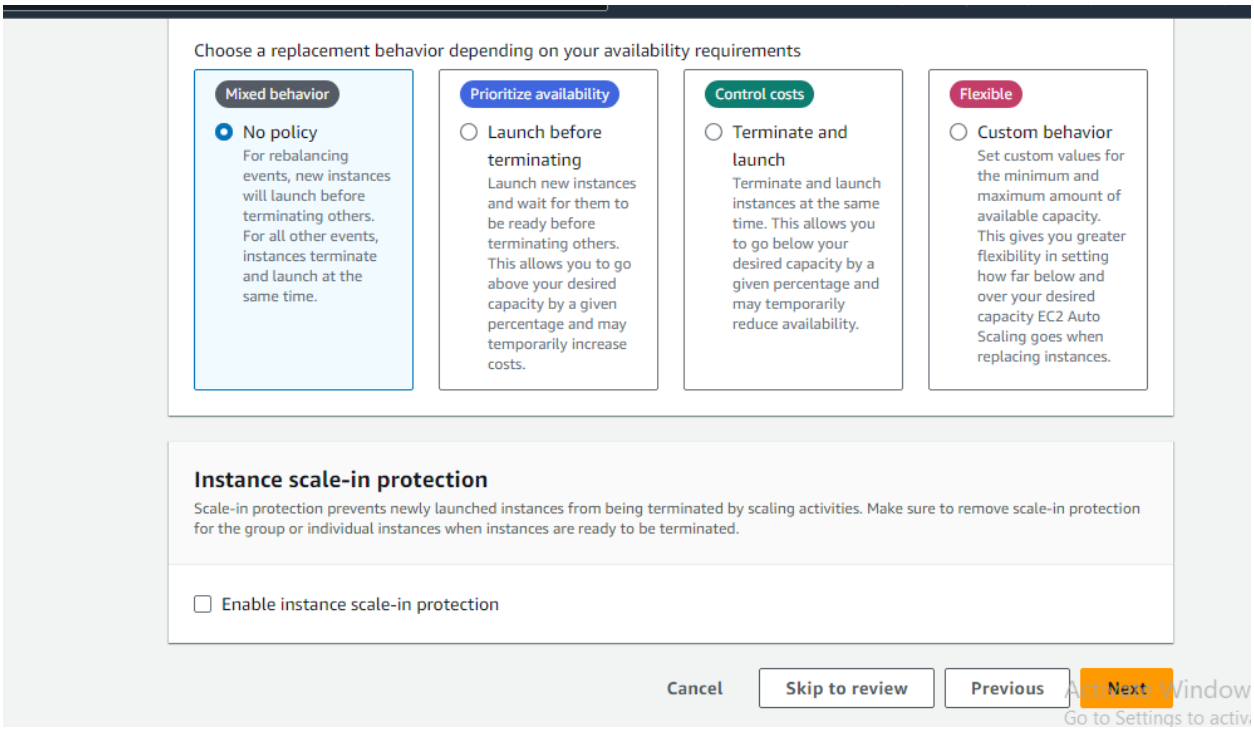
9. Go down and Click on next



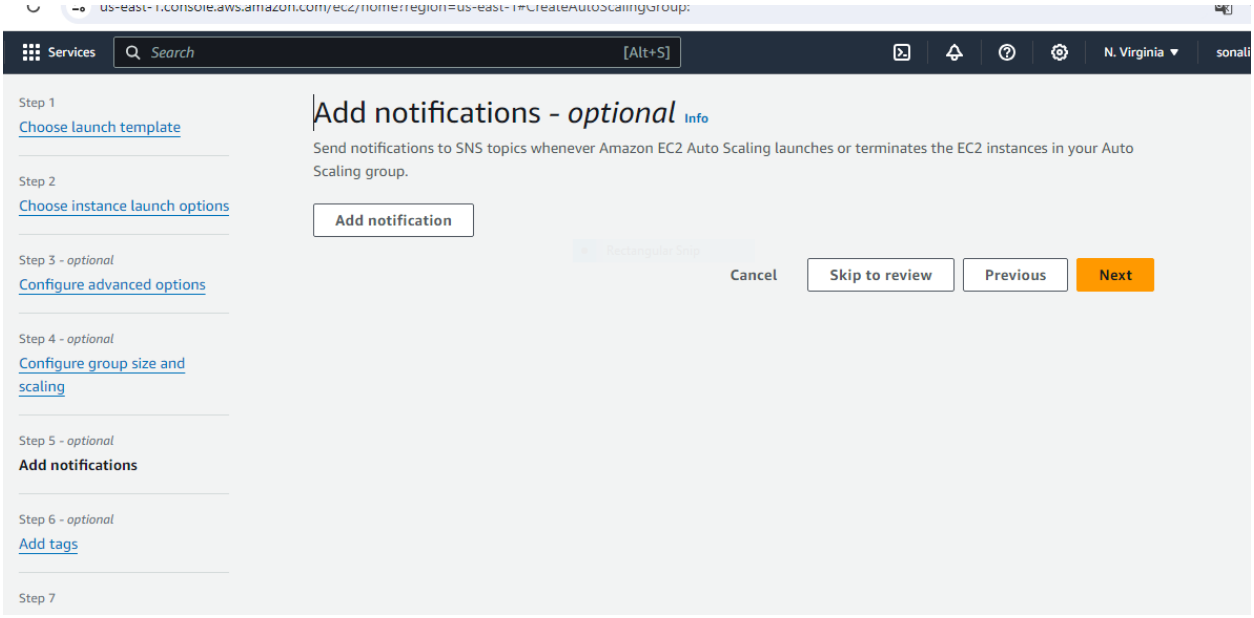
10. Enter the Desire capacity, Minimum capacity and Maximum Capacity.



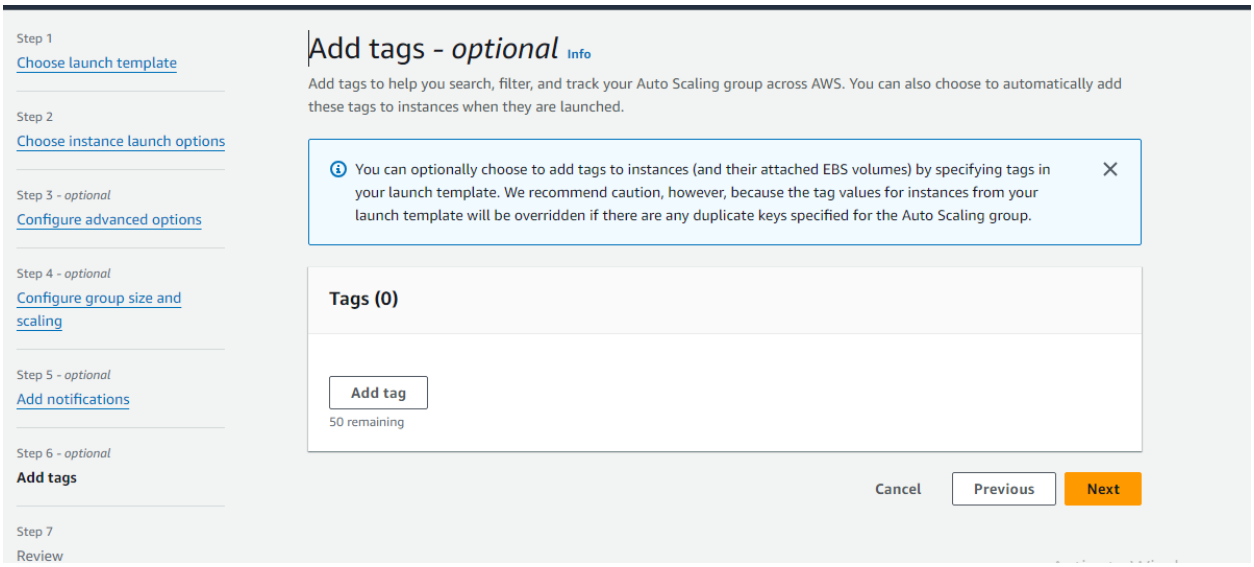
11. Go Down and Click on next



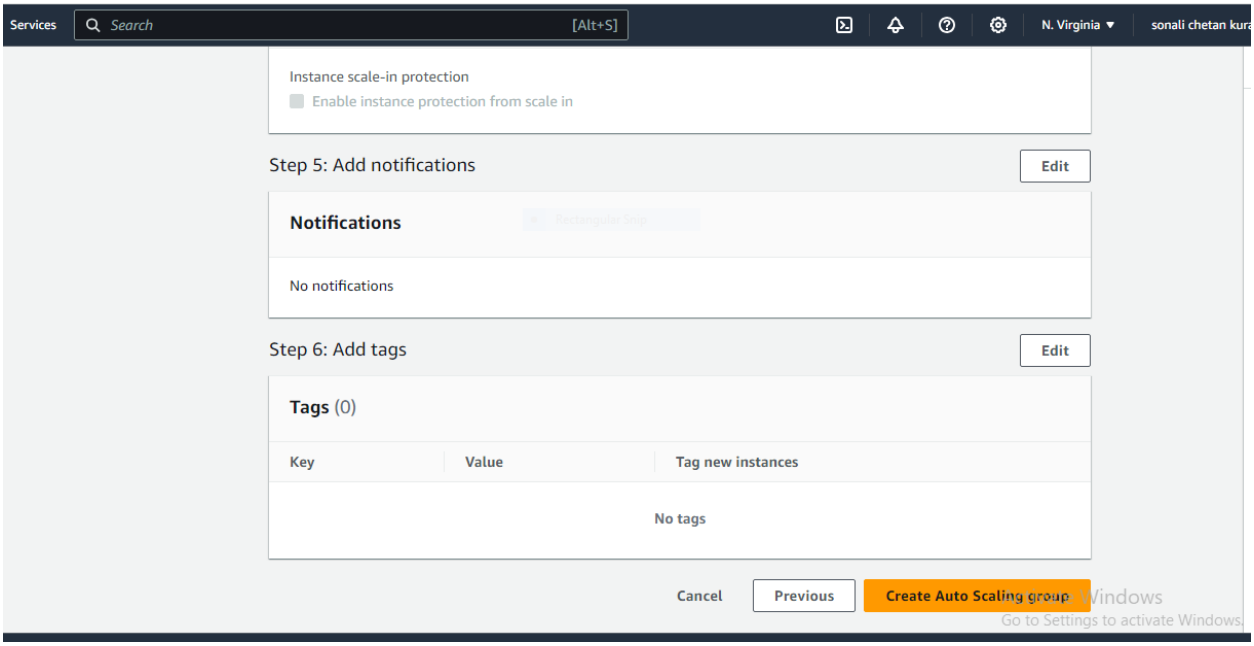
11. Click on next



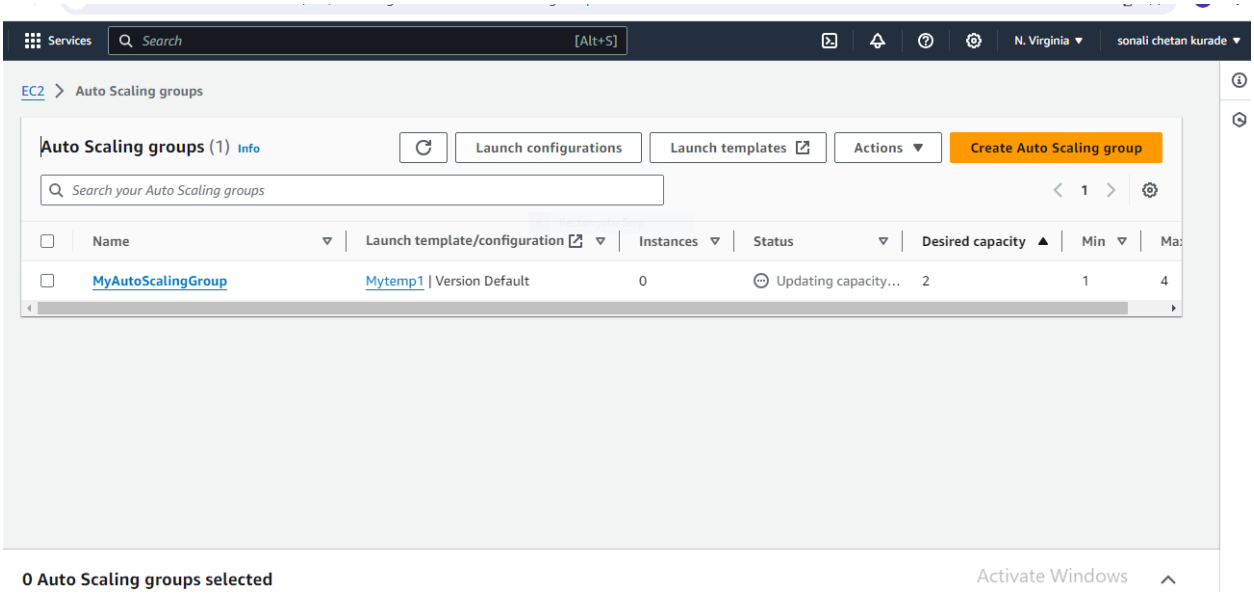
12. Add tag option and click on next



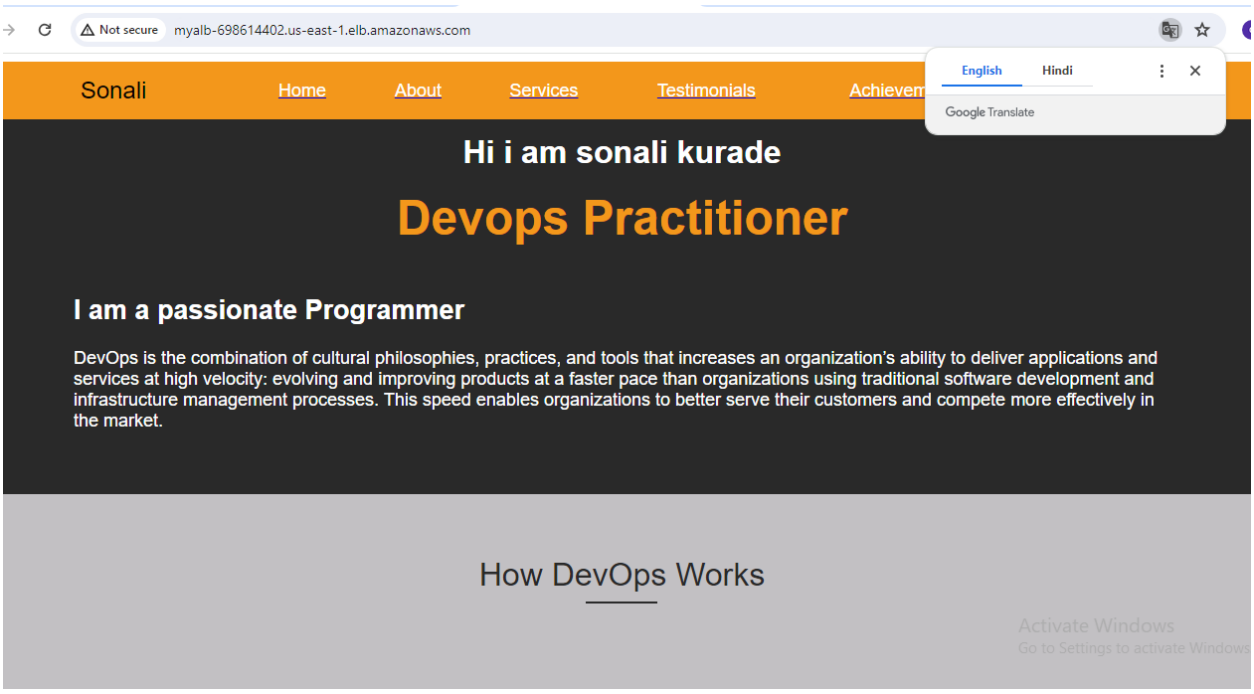
13. Go down and click on create autoscaling Group



14. Auto Scaling Group is ready



15. Go to the load balancer and copy the DNS and paste it on browser.


Not secure
myalb-698614402.us-east-1.elb.amazonaws.com
English
Hindi
Google Translate
Sonali
Home
About
Services
Testimonials
Hi i am sonali kurade
Devops Practitioner
I am a passionate Programmer
DevOps is the combination of cultural philosophies, practices, and tools that increases an organization's ability to deliver applications and services at high velocity: evolving and improving products at a faster pace than organizations using traditional software development and infrastructure management processes. This speed enables organizations to better serve their customers and compete more effectively in the market.
How DevOps Works
Activate Windows
Go to Settings to activate Windows.