

Assignment - 1
Edge Computing - SEZG586

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BITS Pilani
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Q2. Create a EC2 AWS instance and lunch it and share the details in a pdf file which should contain the details of your orgs.

Create a EC2 AWS instance and lunch it and share the details in a pdf file which should contain the details of your orgs.

Answer:

Creating an AWS EC2 instance using the AWS Management Console or AWS CLI.
Here's a general step to creating an EC2 instance:

Steps to Create an EC2 Instance in AWS:

1. Create Free Tier products with a new AWS account.

AWS link open account: <https://portal.aws.amazon.com/billing/signup#/start/email>

- Sign up for a Free **AWS account**. Creating an **AWS account** is free and gives me immediate **access** to the **AWS Free Tier**
- Gain free, hands-on experience with the AWS platform, products, and services

portal.aws.amazon.com/billing/signup#/start/email

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English ▼

aws

Sign up for AWS

Explore Free Tier products with a new AWS account.

To learn more, visit aws.amazon.com/free.



Root user email address
Used for account recovery and some administrative functions

AWS account name
Choose a name for your account. You can change this name in your account settings after you sign up.

Verify email address

OR

Sign in to an existing AWS account

- **Select Basic support Free tier account.**

AWS Account Al x AWS Console - x Free Cloud Com x e-Learning Porti x Dashboard x SATISH KUMAR x Professional Edi x +

portal.aws.amazon.com/billing/signup#/support

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aws

Sign up for AWS

Select a support plan

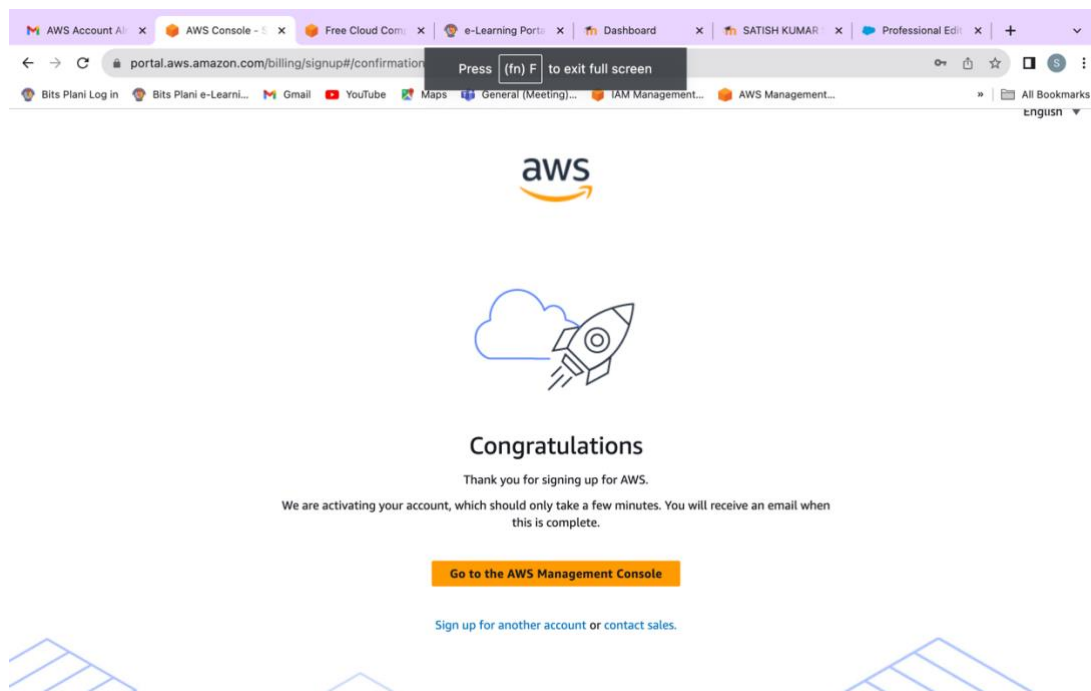
Choose a support plan for your business or personal account. [Compare plans and pricing examples](#)

[You can change your plan anytime in the AWS Management Console.](#)

<p><input checked="" type="radio"/> Basic support - Free</p> <ul style="list-style-type: none"> Recommended for new users just getting started with AWS 24x7 self-service access to AWS resources For account and billing issues only Access to Personal Health Dashboard & Trusted Advisor 	<p><input type="radio"/> Developer support - From \$29/month</p> <ul style="list-style-type: none"> Recommended for developers experimenting with AWS Email access to AWS Support during business hours 12 (business)-hour response times 	<p><input type="radio"/> Business support - From \$100/month</p> <ul style="list-style-type: none"> Recommended for running production workloads on AWS 24x7 tech support via email, phone, and chat 1-hour response times Full set of Trusted Advisor best-practice recommendations 
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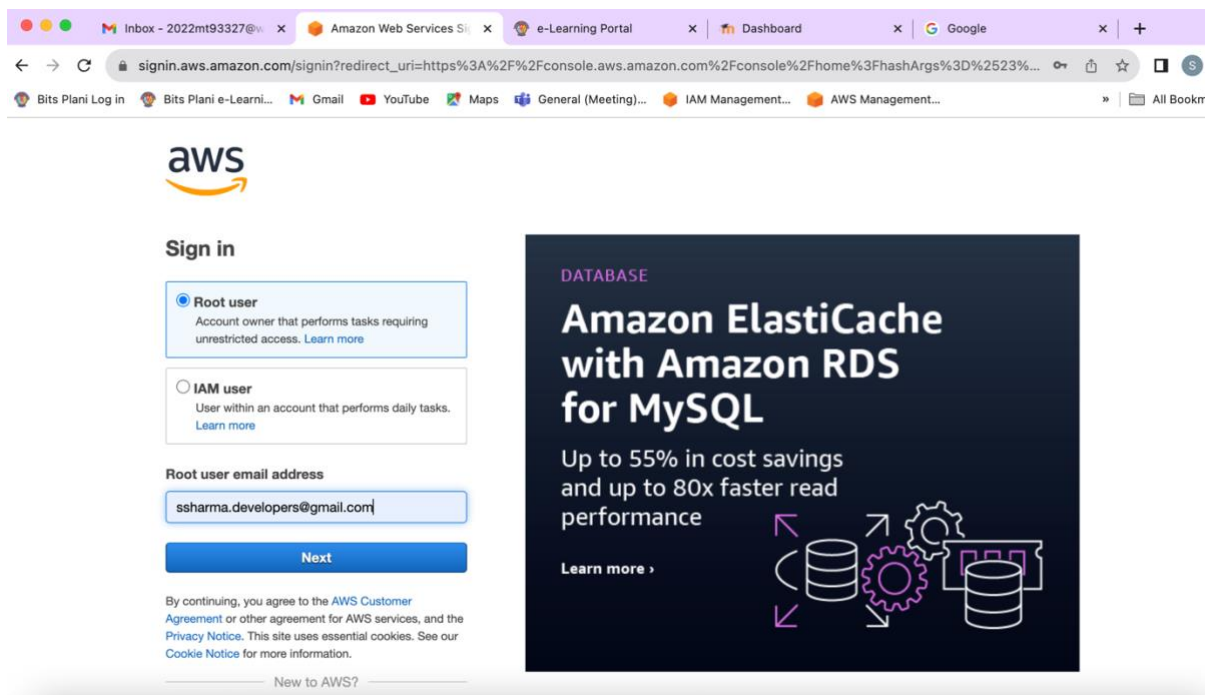
Need Enterprise level support?

From \$15,000 a month you will receive 15-minute response times and concierge-style



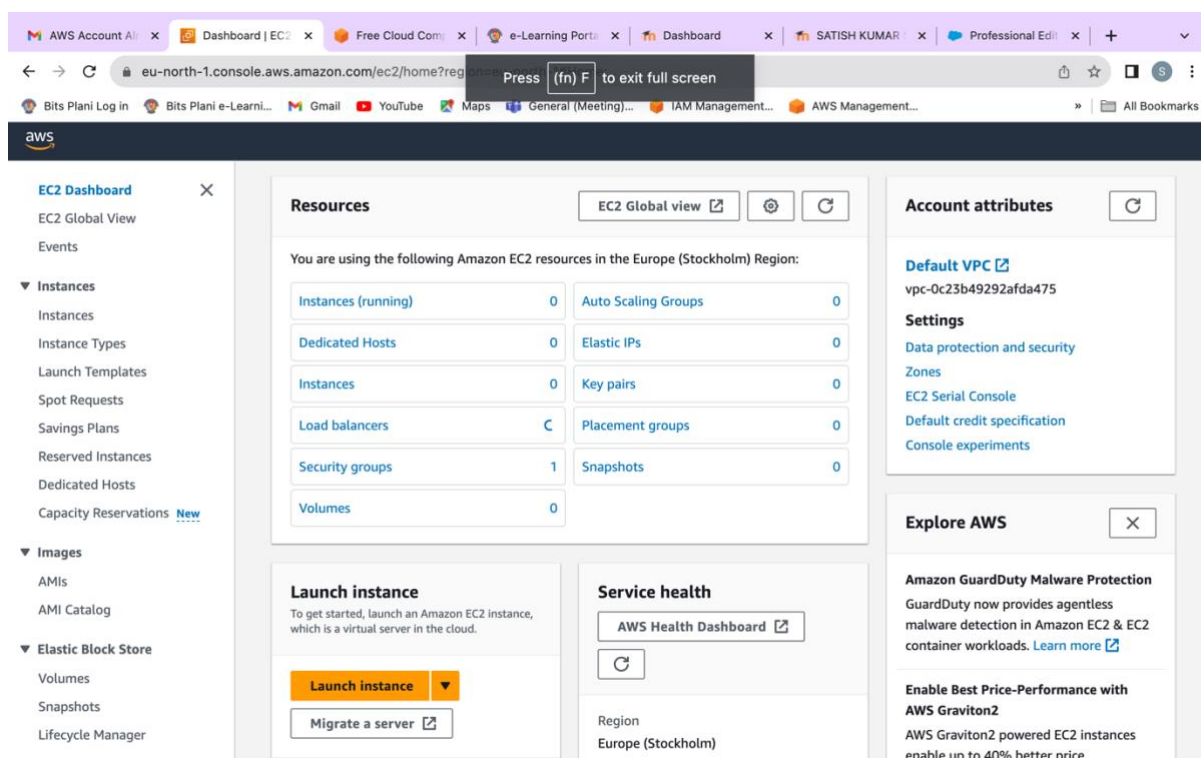
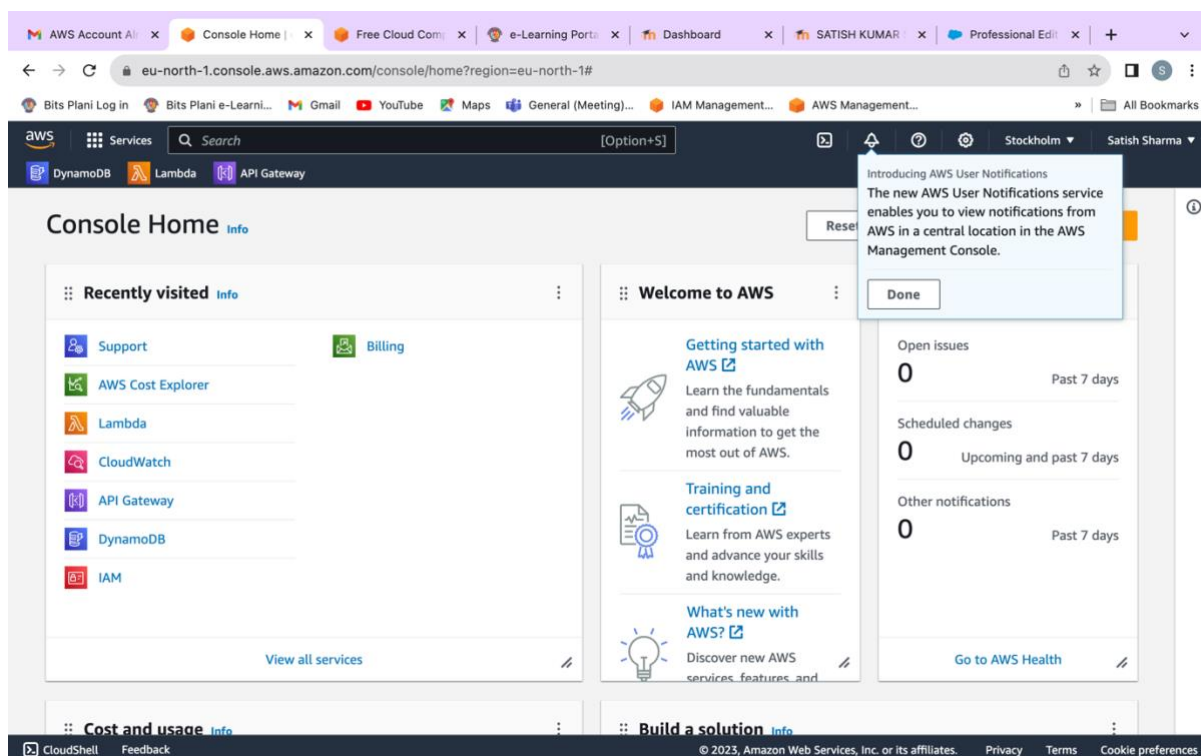
2. Sign in to the AWS Management Console:

- Navigate to the AWS Management Console.
- Sign in with AWS account credentials.



3. Navigate to EC2:

- In the AWS Management Console, search for and select "EC2" under the "Find Services" search bar or find it under the "Compute" section.



4. Launch an Instance:

- Click on the "Instances" in the left-hand navigation pane.
- Click the "Launch Instance" button.

eu-north-1.console.aws.amazon.com/ec2/home?region=eu-north-1#Home:

Services Search [Option+S]

DynamoDB Lambda API Gateway EC2

EC2 Dashboard

EC2 Global View
Events

▼ **Instances**

Instances
Instance Types
Launch Templates
Spot Requests
Savings Plans
Reserved Instances
Dedicated Hosts
Capacity Reservations [New](#)

▼ **Images**

AMIs
AMI Catalog

Launch instance

To get started, launch an Amazon EC2 instance, which is a virtual server in the cloud.

[Launch instance](#) [Migrate a server](#)

Note: Your instances will launch in the Europe (Stockholm) Region

Scheduled events

[Europe \(Stockholm\)](#)
No scheduled events

Service health

[AWS Health Dashboard](#)

Region
Europe (Stockholm)

Zones

Zone name	Zone ID
eu-north-1a	eun1-az1
eu-north-1b	eun1-az2
eu-north-1c	eun1-az3

Amazon GuardDuty Malware Protection

GuardDuty now provides agentless malware detection in Amazon EC2 & EC2 container workloads. [Learn more](#)

Enable Best Price-Performance with AWS Graviton2

AWS Graviton2 powered EC2 instances enable up to 40% better price performance for a broad spectrum of cloud workloads. [Learn more](#)

10 Things You Can Do Today to Reduce AWS Costs

Explore how to effectively manage your AWS costs without compromising on performance or capacity. [Learn more](#)

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eu-north-1.console.aws.amazon.com/ec2/home?region=eu-north-1#LaunchInstances:

Services Search Compute environment

DynamoDB Lambda API Gateway EC2

EC2 > Instances > Launch an instance

Launch an instance [Info](#)

Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.

Name and tags [Info](#)

Name
e.g. My Web Server [Add additional tags](#)

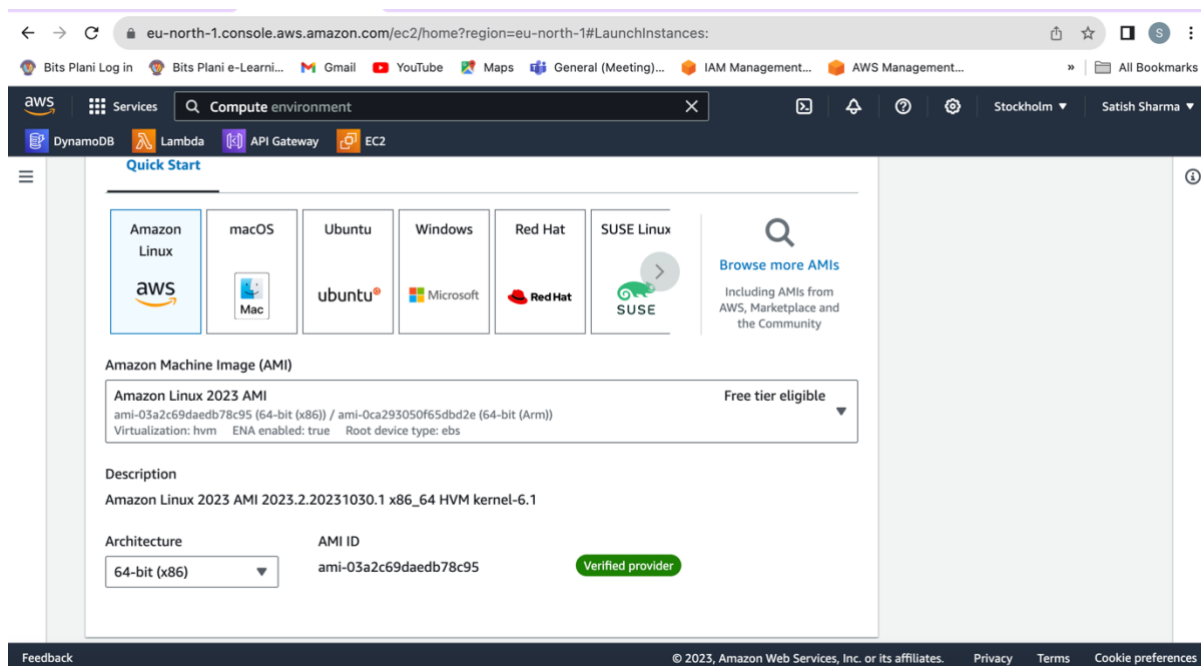
▼ **Application and OS Images (Amazon Machine Image)** [Info](#)

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below

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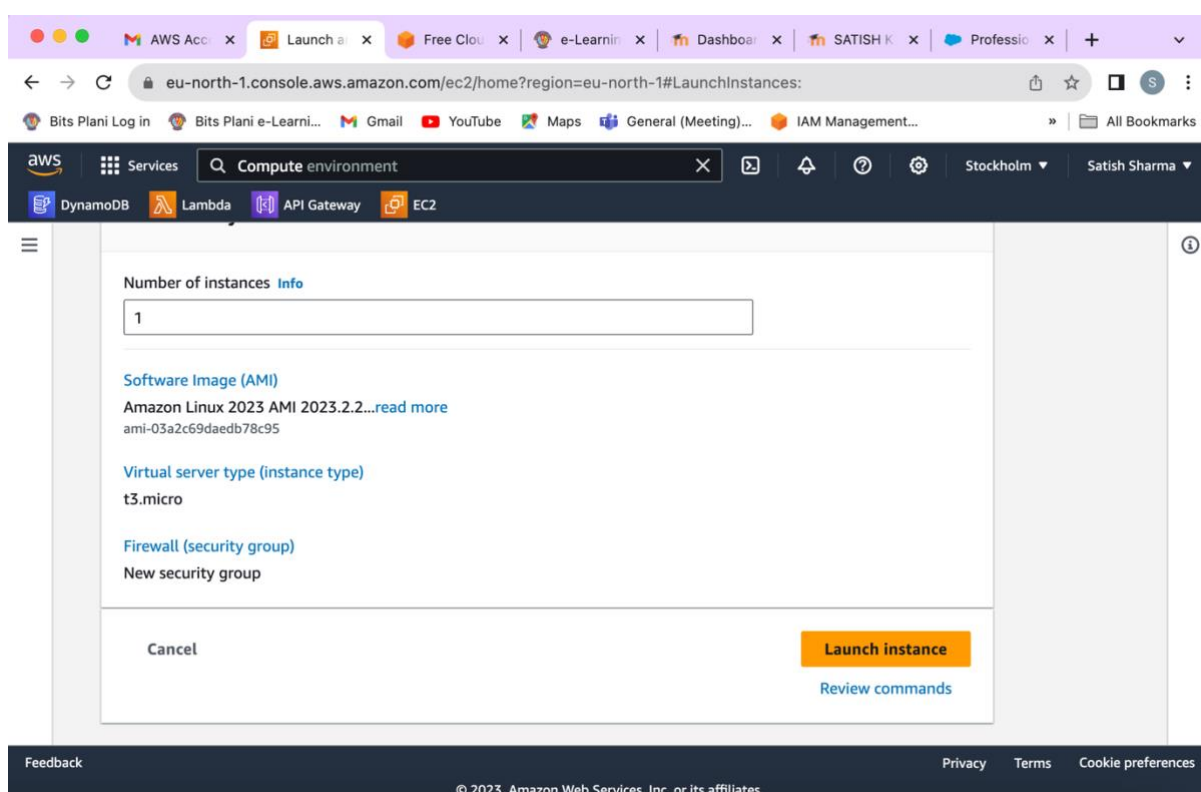
5. Choose an Amazon Machine Image (AMI):

- Select an AMI based on requirements. This is the operating system for your instance.



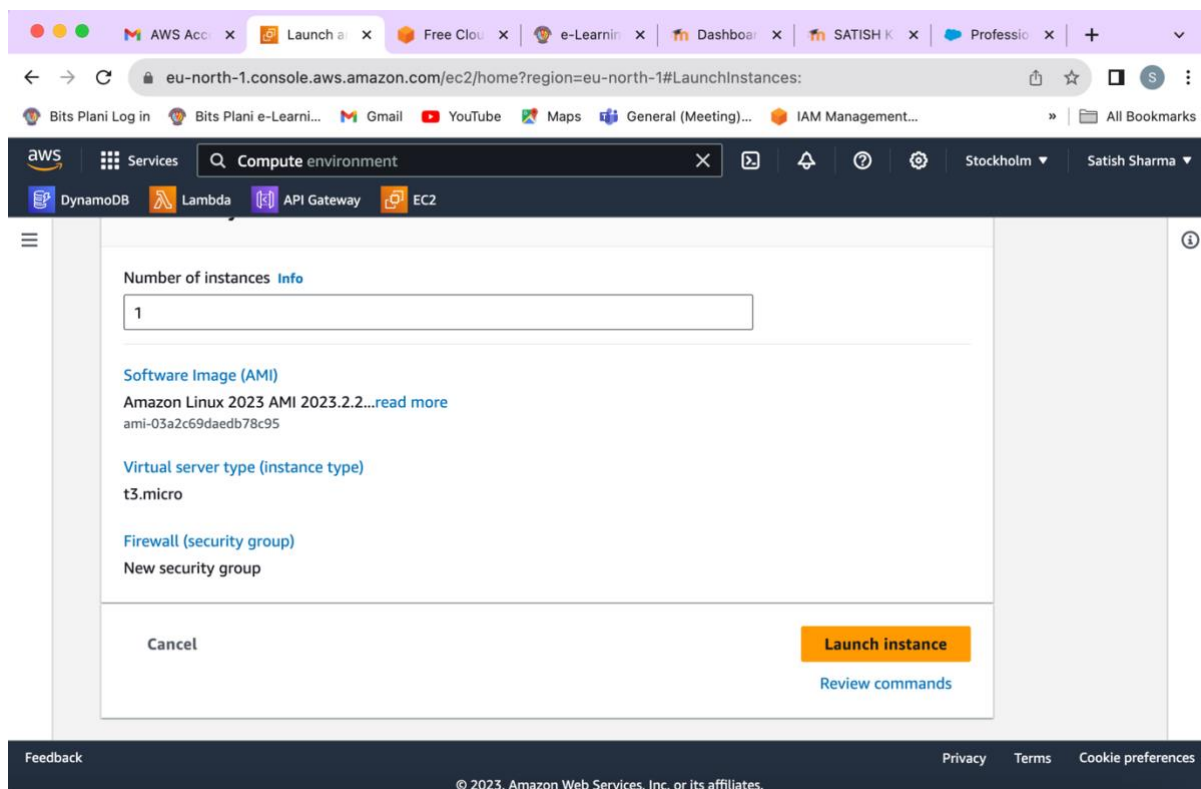
6. Choose an Instance Type:

- Select the instance type based on your workload needs (e.g., t2.micro, t3.medium).



7. Configure Instance:

- Configure instance details, including the number of instances, network settings, and IAM role.



8. Add Storage:

- Specify the storage settings for your instance.

9. Add Tags (Optional):

- Add tags to your instance for easier identification.

10. Configure Security Group:

- Configure security groups to control inbound and outbound traffic to your instance.

11. Review and Launch:

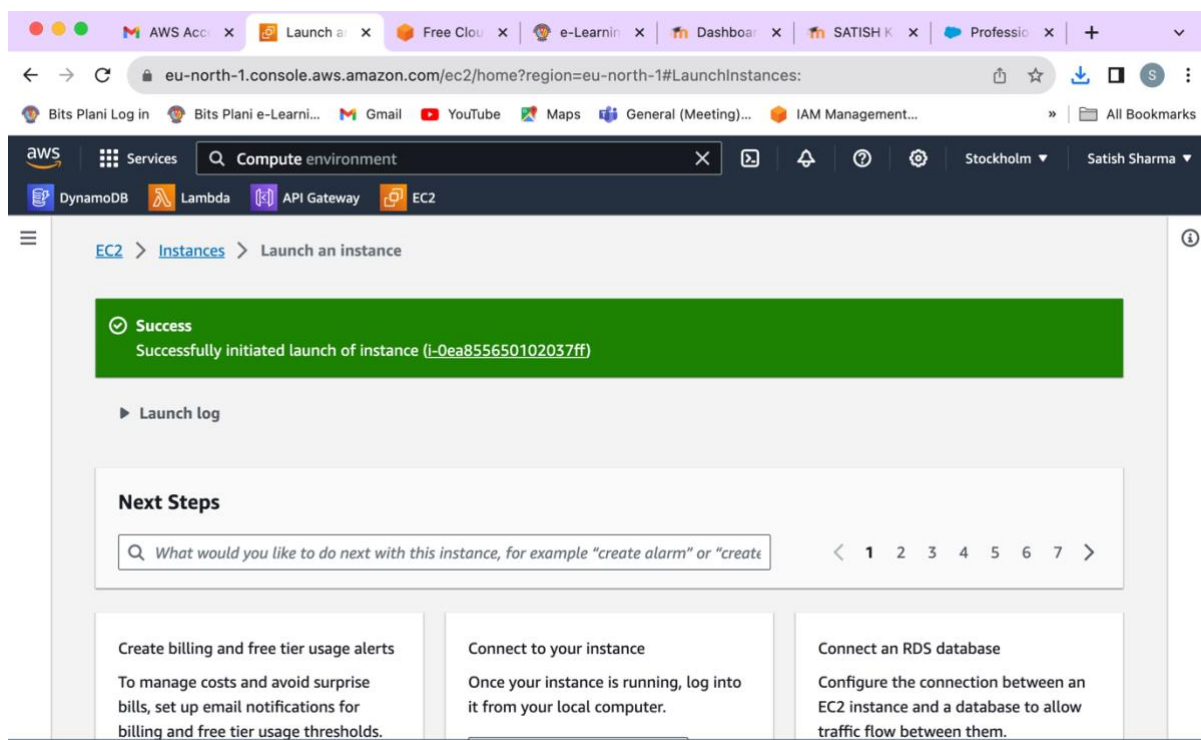
- Review your configurations and click "Launch."

12. Create a Key Pair:

- Choose an existing key pair or create a new one. This is essential for securely connecting to your instance.

13. Launch Instances:

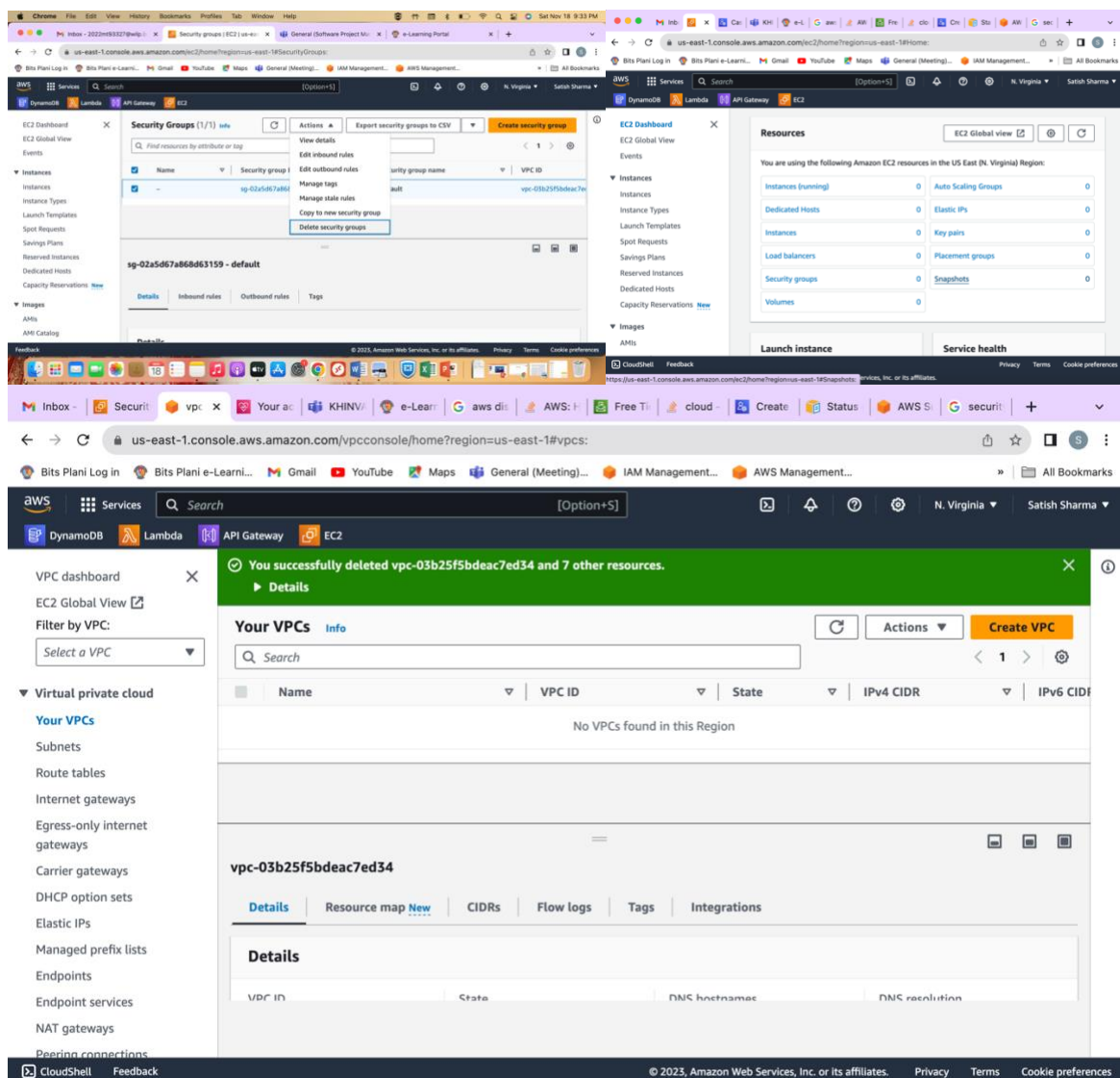
- Click "Launch Instances."



- Instances created successful and launched successfully.
- Ensuring to follow AWS best practices for security, such as using secure key pairs and configuring security groups appropriately.
- Never share sensitive information publicly, including your AWS access credentials, key pairs, or organizational details.
- If you need specific information about your organization's AWS account, it
- After launching the instance, we can view the details such as the instance ID, public IP address, and other relevant information in the AWS Management Console.
- Always follow AWS security best practices, and avoid sharing sensitive information publicly. If you need to share details, consider redacting or excluding sensitive information and share only the necessary details for the intended purpose.
- AWS CLI & AWS SDKs To view the details for your organization You can use one of the following commands to view details of an organization:
 - AWS CLI: describe-organization the following example shows the information included in the output of this command. \$ aws organizations describe-organization

Next: I am going to disable and remove all the resources.

14. Remove all the resources and terminating the instances to avoid billing:



Conclusions

Created an AWS EC2 instance using the AWS Management Console and launch the instances, allocate the required resources, assign them key, and finally terminated after the testing.

Thank You.