

# Assignment: 12

**Problem Statement:** Deploy and run project in AWS without using port.

## Procedure:

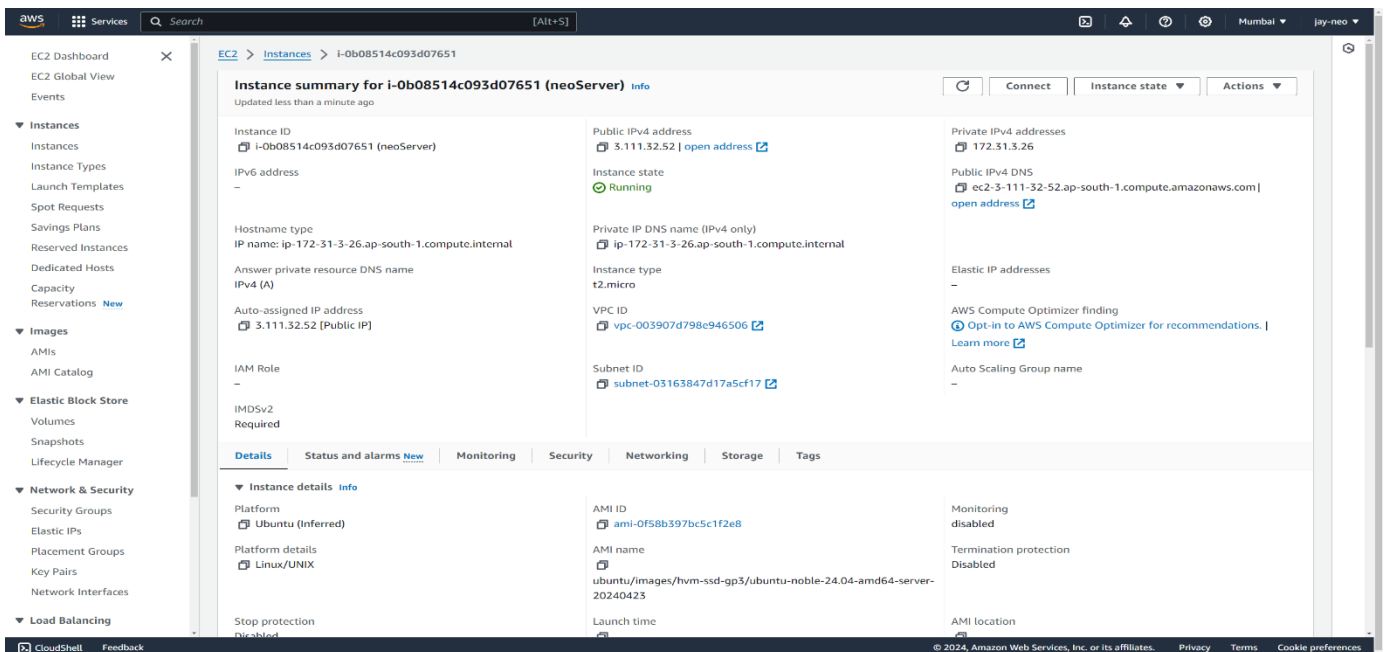
**Step 1:** Launch a new EC2 instance with existing security group created at Assignment-10 and paste the following code in Editor option of Advance details:

```
#!/bin/bash
apt-get update
apt-get install -y nginx
systemctl start nginx
systemctl enable nginx
apt-get install -y git
curl -SL https://deb.nodesource.com/setup_16.x|sudo -E bash -
apt-get install -y nodejs
git clone http://github.com/jay-neo/IT-Workshop-AWS-10.git
npm i
```

The screenshot displays the AWS Management Console's 'Launch an instance' wizard. The interface is in English and shows the following configuration details:

- Name and tags:** The instance is named 'neoServer'.
- Application and OS Images (Amazon Machine Image):** The selected AMI is 'Ubuntu Server 24.04 LTS (HVM)' with ID 'ami-0f58b397bc5c1f2e8'. It is a 64-bit (x86) architecture.
- Instance type:** The selected instance type is 't2.micro'.
- Key pair (login):** The selected key pair is 'sshKey'.
- Network settings:** The instance is being launched in the 'vpc-003907d798e946506' VPC. The security group is 'sg-0d18c09c452db9a80'.
- Configure storage:** The instance has a single root volume of 8 GiB, type 'gp3'.

A 'Free tier' banner is visible on the right side of the console, indicating that the instance is eligible for the free tier.



**Step 2:** From local machine terminal connect with the created EC2 instance using ssh client.

```
>> ssh -i ~/Downloads/sshKey.pem ubuntu@3.111.32.52
```

Here 3.111.32.52 is the public IPv4 of the EC2 instance.

**Step 3:** Go to the directory `/etc/nginx/sites-available` and modify the available file “**default**” by using following commands:

```
>> cd /etc/nginx/sites-available
>> sudo nano default
```

and manipulate the location part exist the “**default**” file

```
location / { proxy_pass http://localhost:4000;
              proxy_http_version 1.1;
              proxy_set_header Upgrade $http_upgrade;
              proxy_set_header Connection 'Upgrade';
              proxy_set_header Host $host;
              proxy_cache_bypass $http_upgrade;
            }
```

then save the “**default**” file.

**Step 4:** Restart the nginx server by using following command,

```
>> sudo systemctl restart nginx
```

**Step 5:** Go the project repository and start the server.

```
>> cd ~/ IT-Workshop-AWS-10
>> node index.js
```

**Step 6:** Go to the public IPv4 of the EC2 instance without using the port and the project root webpage.

