Karthick J (DO14)
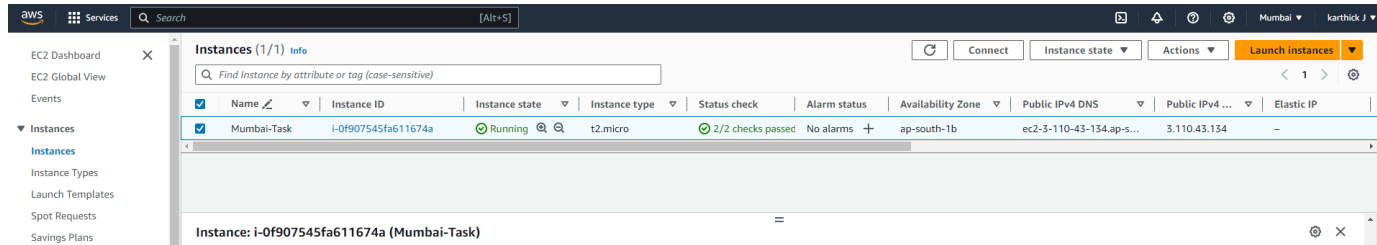
Question
Launch a t2.micro instance in Mumbai region where ssh can be done only from your IP address with docker and docker-compose installed in it.

Solution:
Step:1
Launching an EC2 instance.

Step:2
Connecting the instance and installing Docker.

```
ubuntu@ip-172-31-8-77:~$ sudo apt-get install -y docker.io
Reading package lists... Done
Building dependency tree... Done
```

To check

```
ubuntu@ip-172-31-8-77:~$ docker version
Client:
 Version:           24.0.5
 API version:       1.43
 Go version:        go1.20.3
 Git commit:        24.0.5-0ubuntu1~22.04.1
 Built:             Mon Aug 21 19:50:14 2023
 OS/Arch:           linux/amd64
 Context:           default
permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Get "http://%2Fvar
%2Frun%2Fdocker.sock/v1.24/version": dial unix /var/run/docker.sock: connect: permission denied
```

To check the status of docker running. **systemctl status docker**

```
ubuntu@ip-172-31-8-77:~$ systemctl status docker
● docker.service - Docker Application Container Engine
     Loaded: loaded (/lib/systemd/system/docker.service; enabled; vendor preset: enabled)
     Active: active (running) since Mon 2023-10-30 11:45:00 UTC; 10min ago
TriggeredBy: ● docker.socket
       Docs: https://docs.docker.com
   Main PID: 2167 (dockerd)
      Tasks: 7
     Memory: 32.6M
        CPU: 343ms
     CGroup: /system.slice/docker.service
             └─2167 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/containerd.sock
```

Step:3
Installing docker-compose.

```
ubuntu@ip-172-31-8-77:~$ sudo apt-get install -y docker-compose
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  python3-docker python3-dockerpty python3-docopt python3-dotenv python3-texttable python3-websocket
The following NEW packages will be installed:
  docker-compose python3-docker python3-dockerpty python3-docopt python3-dotenv python3-texttable python3-websocket
0 upgraded, 7 newly installed, 0 to remove and 41 not upgraded.
```

To check

```
ubuntu@ip-172-31-8-77:~$ docker-compose --version
docker-compose version 1.29.2, build unknown
ubuntu@ip-172-31-8-77:~$
```

Step:4

SSH connection of my security group.

Edit inbound rules Info

Inbound rules control the incoming traffic that's allowed to reach the instance.

Inbound rules Info

Security group rule ID	Type Info	Protocol Info	Port range Info	Source Info		Description - optional Info	
sgr-049d65908238778d7	SSH ▼	TCP	22	My IP ▼	🔍		Delete
					54.240.197.227/32 ✕		

Add rule