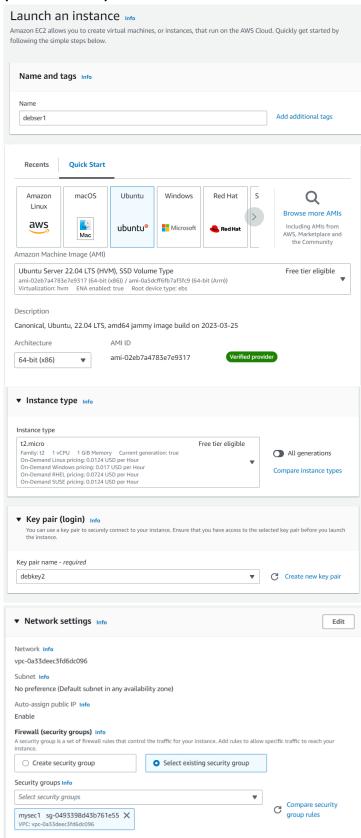
## **ASSIGNMENT-12**

Problem Statement: Deploy a project from GitHub to EC2 without using Port.

## **Procedures:**

- 1. Sign-in to AWS console.
- 2. Go to the EC2 dashboard. Now go to the instances page.
- 3. Click on the create new instance button.
- **4.** Now create an EC2 server using the Security Group created earlier and enter the user data (Refer to Ass10)

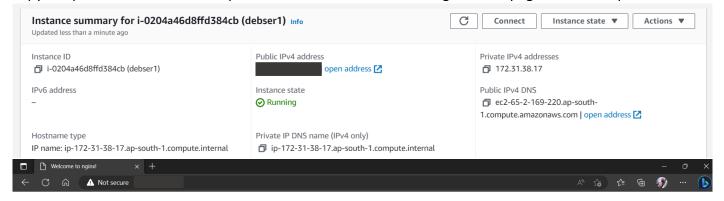




5. Create the instance and click on the instance after creation.



**6.** Copy the public IPv4 address and paste it in another browse. The nginx homepage will show up.



## Welcome to nginx!

Commercial support is available at nginx.com.

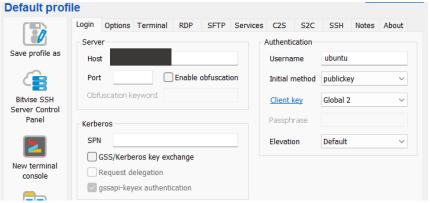
If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to <a href="mailto:nginx.org">nginx.org</a>.

Thank you for using nginx.

Our server is working perfectly. Note, in previous assignments we used to connect to our project webpages using port no. However, in this exercise we are going to access our project webpage without using any port no.

**7.** Copy the Public IPv4 address of the server instance and use this to connect it to the server using Bitvise SSH client. (Refer Ass7)



8. Now open the terminal in Bitvise.

```
Last login: Wed May 10 12:14:04 2023 from 150.129.133.232
To run a command as administrator (user "root"), use "sudo <command>".

See "man sudo_root" for details.

ubuntu@ip-172-31-38-17:~$
```

**9.** Enter the following commands in it.

```
→ pwd
```

```
ubuntu@ip-172-31-38-17:~$ pwd
/home/ubuntu
ubuntu@ip-172-31-38-17:~$
```

(To check current directory)

→ cd /

```
ubuntu@ip-172-31-38-17:~$ cd /
```

(To go to root folder)

→ pwd

```
ubuntu@ip-172-31-38-17:/$ pwd
/
```

→ cd /etc/nginx/sites-available/

```
ubuntu@ip-172-31-38-17:/$ cd /etc/nginx/sites-available/
ubuntu@ip-172-31-38-17:/etc/nginx/sites-available$ ■
```

(To open the sites-available directory under nginx)

→ sudo nano default

```
ubuntu@ip-172-31-38-17:/etc/nginx/sites-available$ sudo nano default
 GNU nano 6.2
                                                       default
# You should look at the following URL's in order to grasp a solid understanding
# of Nginx configuration files in order to fully unleash the power of Nginx.
# https://www.nginx.com/resources/wiki/start/
 https://www.nginx.com/resources/wiki/start/topics/tutorials/config pitfalls/
# https://wiki.debian.org/Nginx/DirectoryStructure
# leave it as reference inside of sites-available where it will continue to be
# updated by the nginx packaging team.
"
# This file will automatically load configuration files provided by other
# applications, such as Drupal or Wordpress. These applications will be made
# available underneath a path with that package name, such as /drupal8.
 Please see /usr/share/doc/nginx-doc/examples/ for more detailed examples.
 Default server configuration
server {
         listen 80 default_server;
         listen [::]:80 default_server;
         # SSL configuration
         # listen 443 ssl default_server;
           listen [::]:443 ssl default_server;
         # Note: You should disable gzip for SSL traffic.
```

(To open the default file in the nano editor)

**10.** After opening the default file in the nano editor, search for the location / {}. It should be after server\_name\_;

```
server_name _;
location / {
         # First attempt to serve request as file, then
         # as directory, then fall back to displaying a 404.
                try_files $uri $uri/ =404;
}
```

11. Comment out the location block and each and every line inside the block.

```
# server_name _;

# location / {
          # First attempt to serve request as file, then
          # as directory, then fall back to displaying a 404.
          #try_files $uri $uri/ =404;

#}
```

**12.** Now paste the following code just under the closing curly bracket.

```
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;
}
```

```
#location / {
    # First attempt to serve request as file, then
    # as directory, then fall back to displaying a 404.
    #try_files $uri $uri/ =404;

#}
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;
}
```

- **13.** Now save it by Ctrl+X and exit nano editor.
- **14.** You will be reverted back to the terminal. Type the following command.....
  - → sudo systemctl restart nginx
    ubuntu@ip-172-31-2-192:/etc/nginx/sites-available\$ sudo systemctl start nginx

**15.** Now paste the public IPv4 address in your browser. Now press Enter. Our project page will show up without entering our port no.



We have successfully deployed a project from GitHub to EC2 without using port.