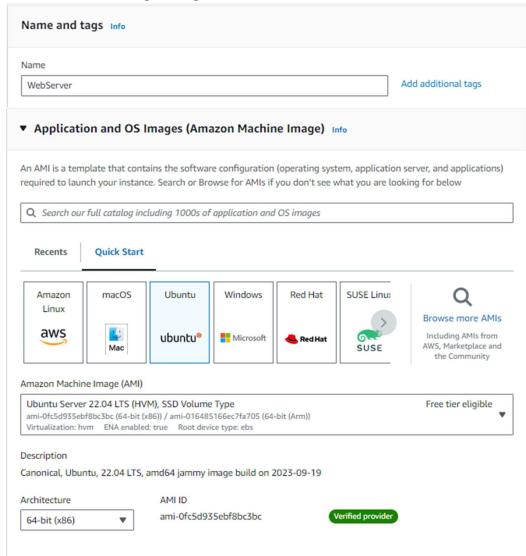
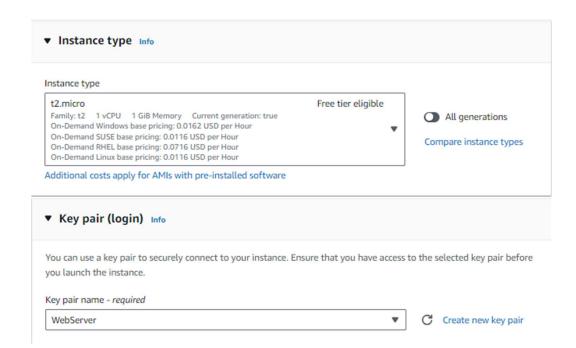
AWS EC2 Setup and Configuration:

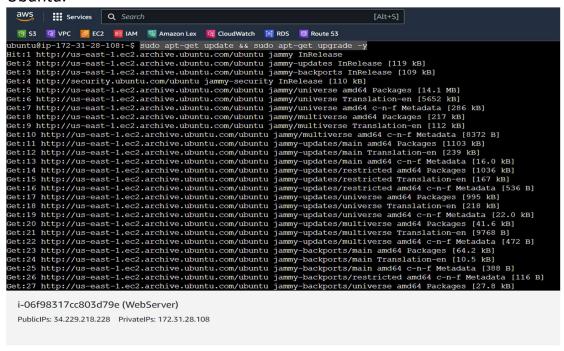
- 1. Login to AWS Console
- 2. Go to Services \rightarrow EC2 \rightarrow Launch Instance
- 3. Select the following configuration:





Use the default VPC and Subnets.
Allow SSH and HTTP/HTTPS in security groups.

- 4. Click on "Launch Instance"
- 5. Once the instance 2 checks click on "connect".
- 6. Run "sudo apt-get update && sudo apt-get upgrade -y" command to update Ubuntu.



7. Once the upgrade is done, use command "sudo apt-get install apache2"

```
No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-28-108:~$ sudo apt-get install apache2
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
```

8. Install "npm" and "nodejs" using the command:

```
"sudo apt install npm"
```

Application Hosting Files Setup:

Here we are going to create a sample VUE.js application using VUE CLI.

- 1. Navigate to the html directory using command "cd /var/www/html".
- 2. Install the VUE CLI using command:

```
"npm install -q @vue/cli"
```

3. Create a sample project using the command:

"vue create hello-world"

Select Default [Vue 3]

```
Vue CLI v5.0.8
? Please pick a preset: (Use arrow keys)
> Default ([Vue 3] babel, eslint)
  Default ([Vue 2] babel, eslint)
  Manually select features
```

[&]quot;sudo apt install nodejs"

4. Now once the project is created. Navigate to the root directory of the project and use "npm run build" to run the application.

```
DONE Compiled successfully in 4025ms

App running at:
- Local: http://localhost:8080/
- Network: http://172.31.28.108:8080/
```

The web application well not be available to the internet unless we configure the Apache server

Configuring the Apache server:

To make our WebApp accessible over the internet we need to setup a reverse proxy using the Apache server configurations.

1. We need to enable "proxy" and "proxy_http" modules using the following commands:

"sudo a2enmod proxy && sudo a2enmod proxy_http"

Restart Apache Server "Sudo systemctl restart apache2"

```
ubuntu@ip-172-31-28-108:~$ sudo a2enmod proxy && sudo a2enmod proxy_http
Module proxy already enabled
Considering dependency proxy for proxy_http:
Module proxy already enabled
Module proxy_http already enabled
ubuntu@ip-172-31-28-108:~$ sudo systemctl restart apache2
```

3. Navigate to /etc/apache2/sites-available/000-default.conf Edit the configuration file using any editor to your required settings/configuration

4. Edit the Following:

```
GNU nano 6.2

<VirtualHost *:80>

ServerAdmin webmaster@localhost
    DocumentRoot /var/www/html

ProxyPreserveHost On
    ProxyPass / http://localhost:8080/
    # Edit the address to your App adress and Port
    ProxyPassReverse
    http://localhost:8080/

    ErrorLog ${APACHE_LOG_DIR}/error.log
    CustomLog ${APACHE_LOG_DIR}/access.log combined

</VirtualHost>

# vim: syntax=apache ts=4 sw=4 sts=4 sr noet
```

5. Restart Appache.

Now Copy your EC2 Instance Public IP and Past it on the Browser.

