

# Host Static Website on EC2 Instance using Linux (AMI)

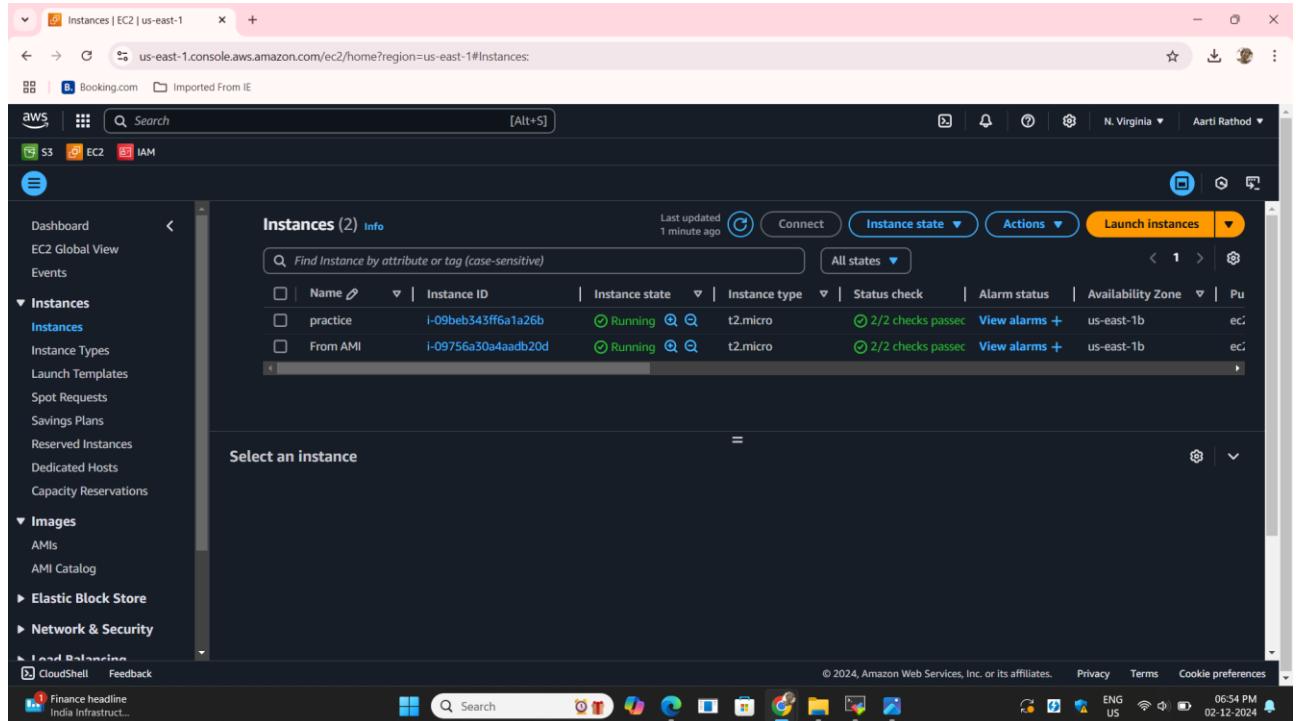
## Step 1: Navigate to the EC2 Dashboard

- From the AWS Console, locate the **Services** menu in the top navigation bar.
- Select **EC2** under the "Compute" category. This will take you to the EC2 Dashboard.

The screenshot shows the AWS EC2 Dashboard in the N. Virginia region. The left sidebar includes links for EC2 Global View, Events, Instances (with sub-links for Instances, Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Capacity Reservations), Images (AMIs, AMI Catalog), Elastic Block Store, Network & Security, Load Balancing, CloudShell, and Feedback. The main content area has sections for Resources (listing 2 running instances, 0 Auto Scaling Groups, 0 Capacity Reservations, 0 Dedicated Hosts, 0 Elastic IPs, 2 Instances, 1 Key pair, 0 Load balancers, 0 Placement groups, 3 Security groups, 1 Snapshot, 2 Volumes), Launch instance (with 'Launch instance' and 'Migrate a server' buttons), Service health (Region: US East (N. Virginia), Status: 'This service is operating normally.'), and Zones. A sidebar on the right details EC2 Free Tier offers, showing 2 offers in use, end-of-month forecast, and usage statistics for Linux EC2 Instances and Storage space on EBS. The bottom of the screen shows the Windows taskbar with various pinned icons and the date/time (02-12-2024, 06:52 PM).

## Step 2: Click on Launch Instances

- On the EC2 Dashboard, click the **Launch Instances** button. This will start the instance creation wizard.



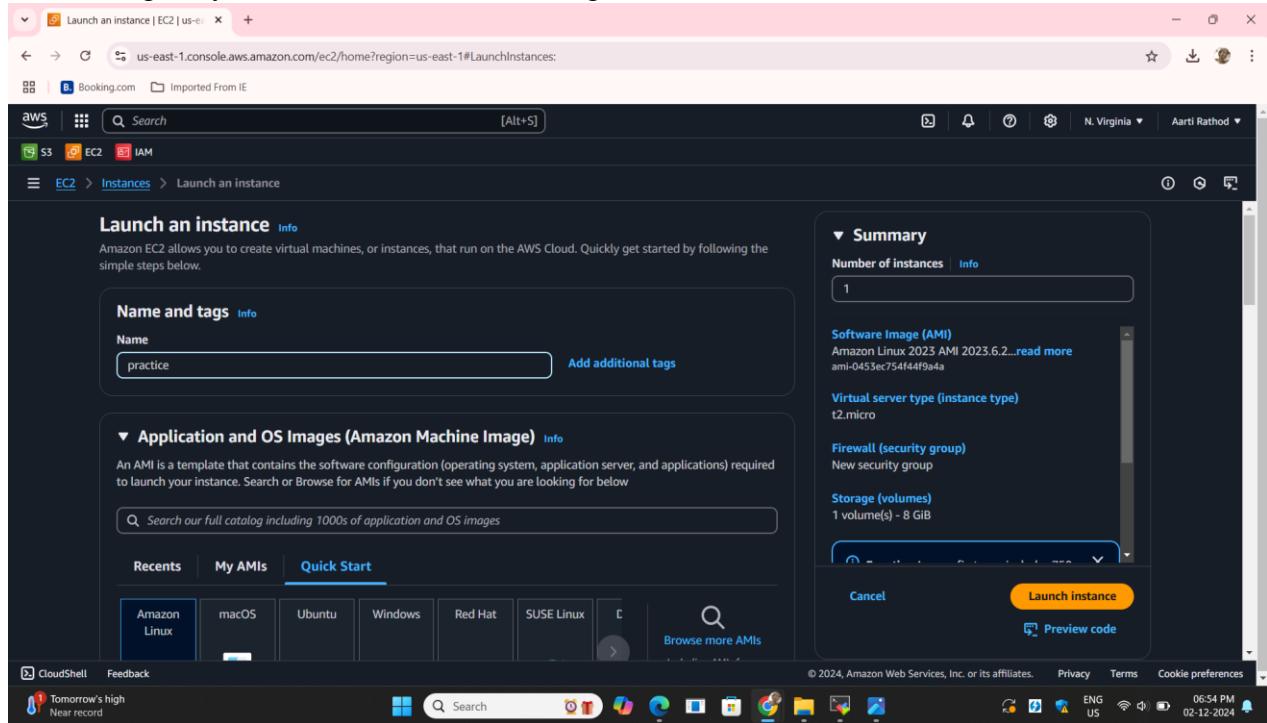
The screenshot shows the AWS EC2 Instances page. The left sidebar has 'Instances' selected under 'EC2 Global View'. The main area displays a table of instances:

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	PU
<input type="checkbox"/>	practice	i-09beb343ff6a1a26b	Running	t2.micro	2/2 checks passed	<a href="#">View alarms</a>	us-east-1b	ec2
<input type="checkbox"/>	From AMI	i-09756a30a4adb20d	Running	t2.micro	2/2 checks passed	<a href="#">View alarms</a>	us-east-1b	ec2

Below the table, a modal window titled 'Select an instance' is open, showing the same two instances. The bottom right corner of the modal shows the date and time: 06:54 PM 02-12-2024.

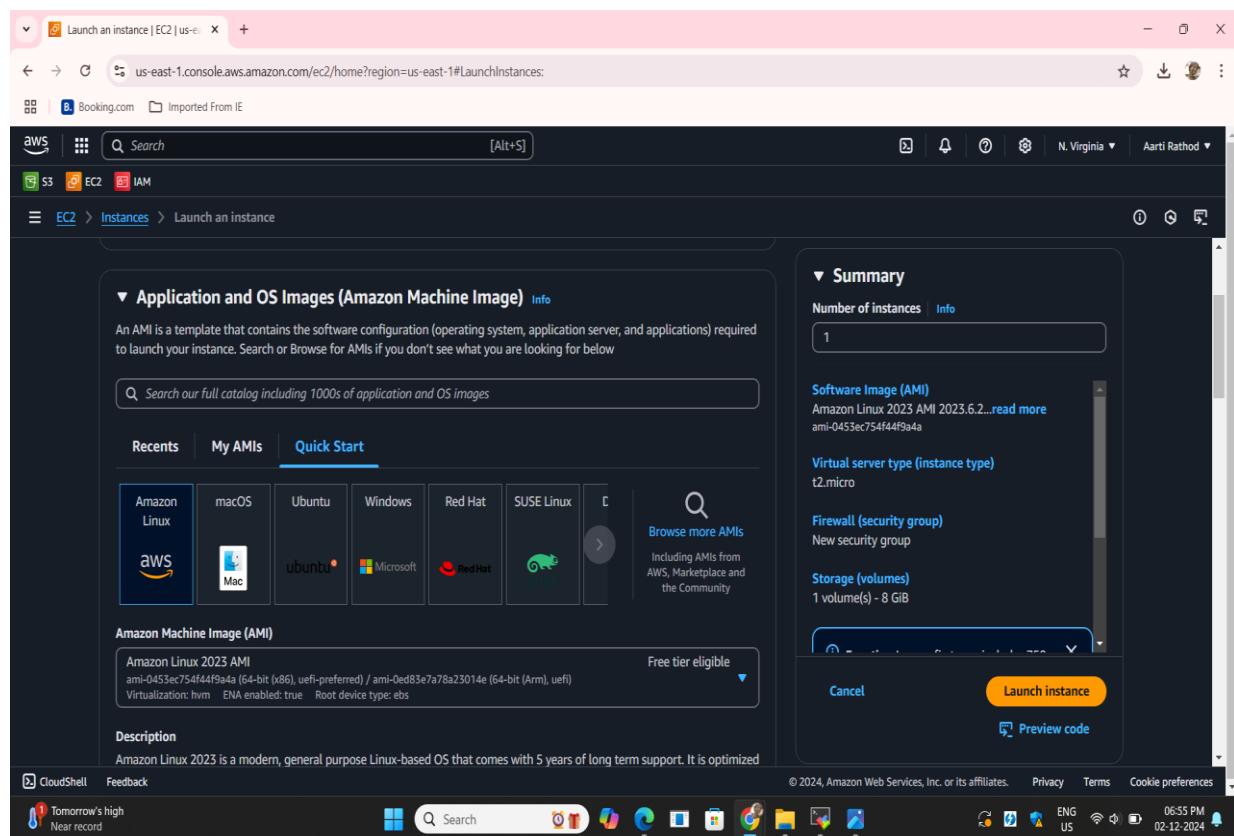
## Step 3: Add Name and Tags

- Add tags to your instance for better management and identification.



## Step 4: Choose an Amazon Machine Image (AMI)

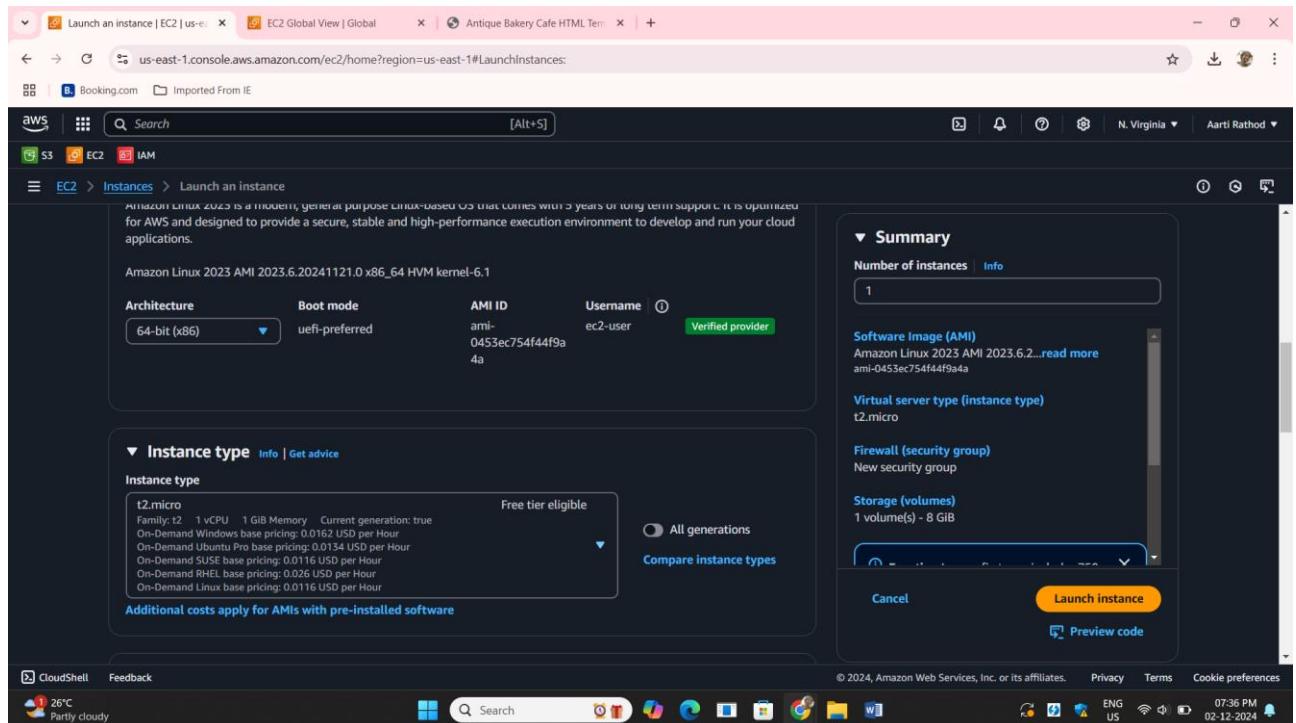
- Select an **AMI**, which is a pre-configured virtual machine template.
- Examples:
  - **Amazon Linux 2 AMI** (Free-tier eligible).
  - **Ubuntu Server**.
  - **Windows Server** (if you need a Windows environment).
- Choose an AMI that suits your requirements for the operating system and software packages.



## Step 5: Choose an Instance Type

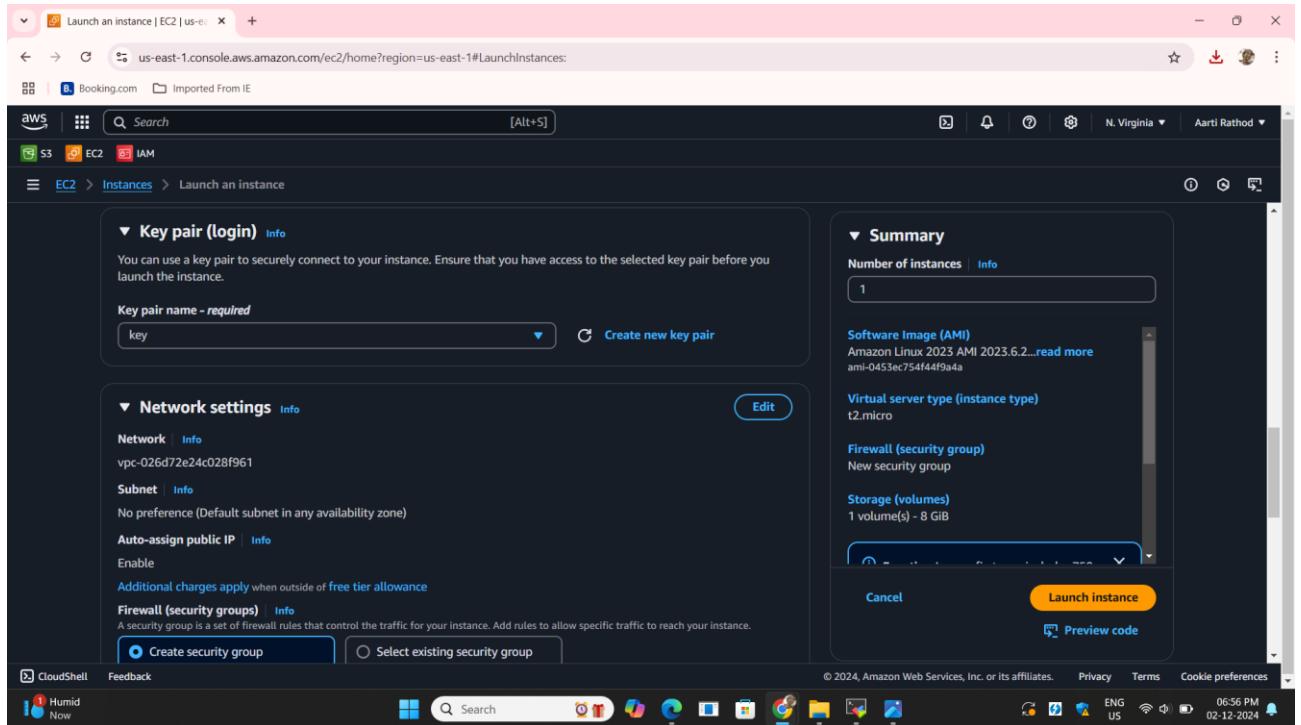
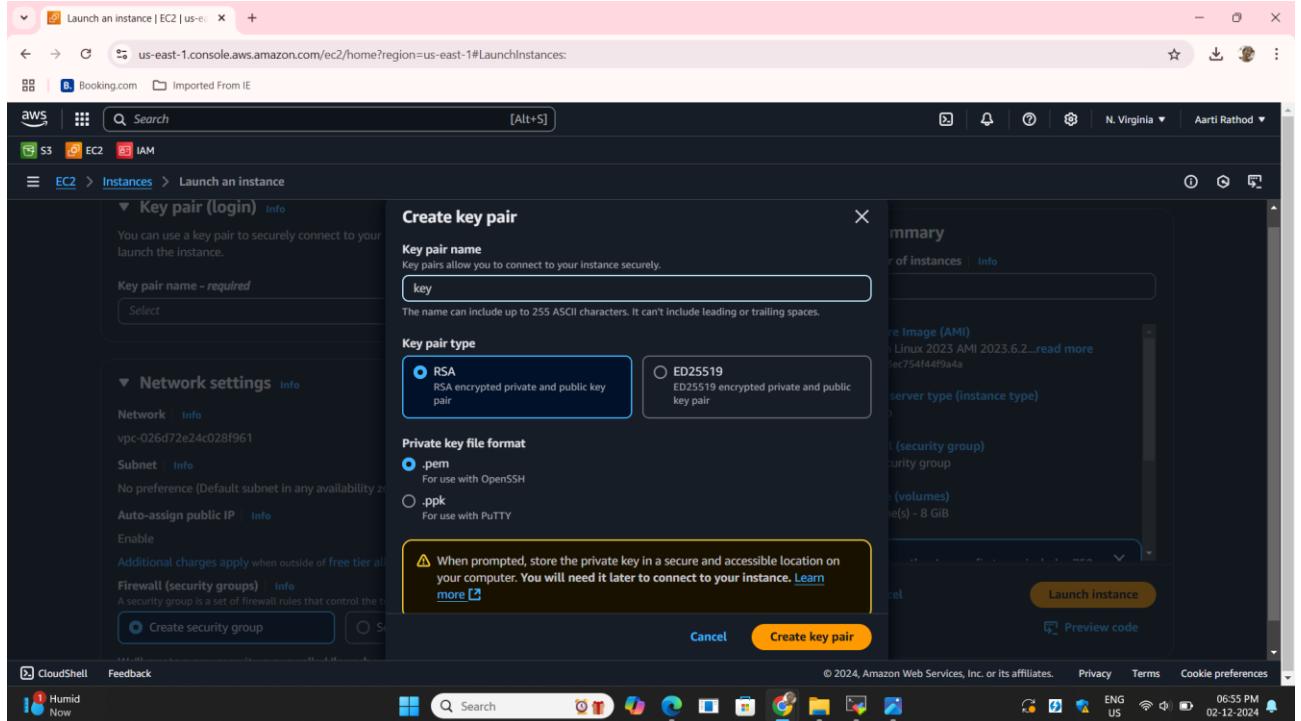
Select the instance type based on your performance needs (CPU, memory, storage, etc.).

- For free-tier eligible users, choose **t2.micro** or **t3.micro**.



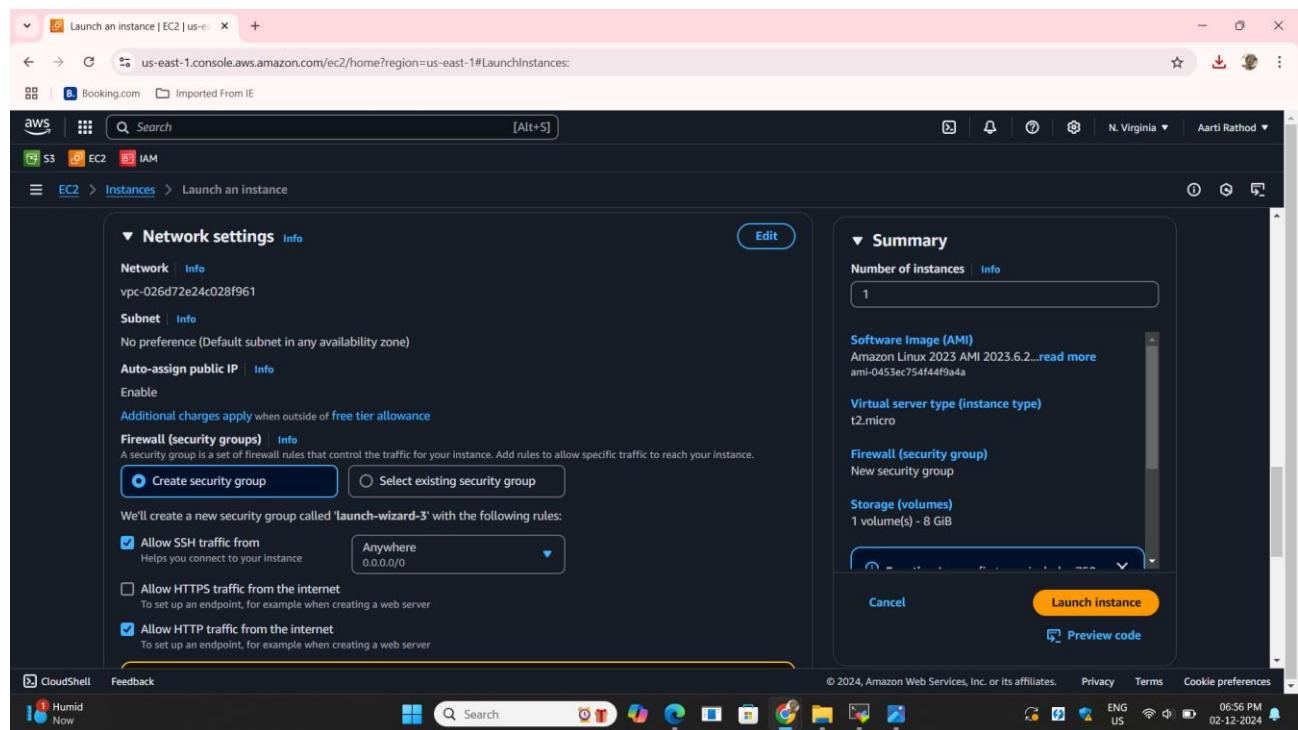
## Step 6: Key Pair Creation

When prompted, create a new key pair or use an existing one for SSH access:  
Download the private key file (.pem) if creating a new key pair.



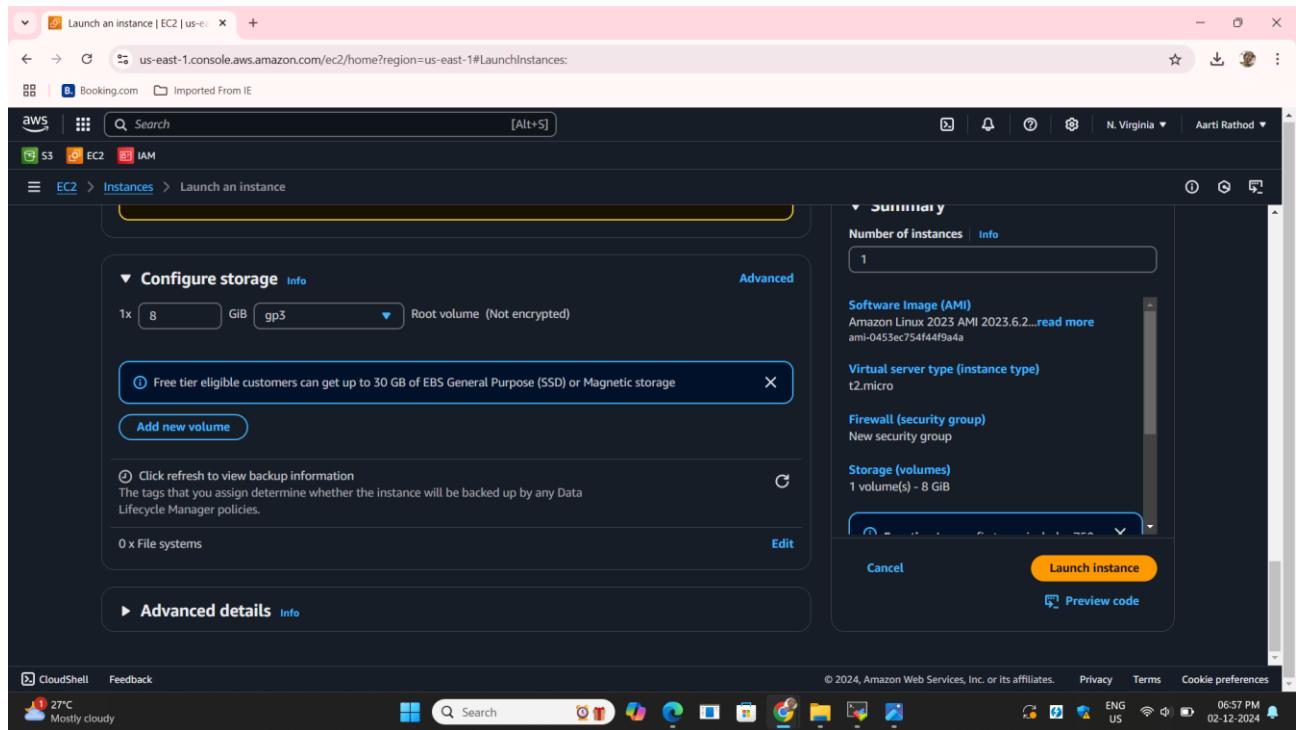
## Step 7: Configure Instance Details

- Specify the details for your instance:
    - Number of instances:** Default is 1.
    - Network:** Select a Virtual Private Cloud (VPC).
    - Subnet:** Choose a subnet for your instance.
    - Auto-assign Public IP:** Enable this if you need internet access.
    - IAM Role:** Assign an IAM role if necessary.
  - Advanced options: Configure placement groups, capacity reservations, etc.
- Click **Next** when done.



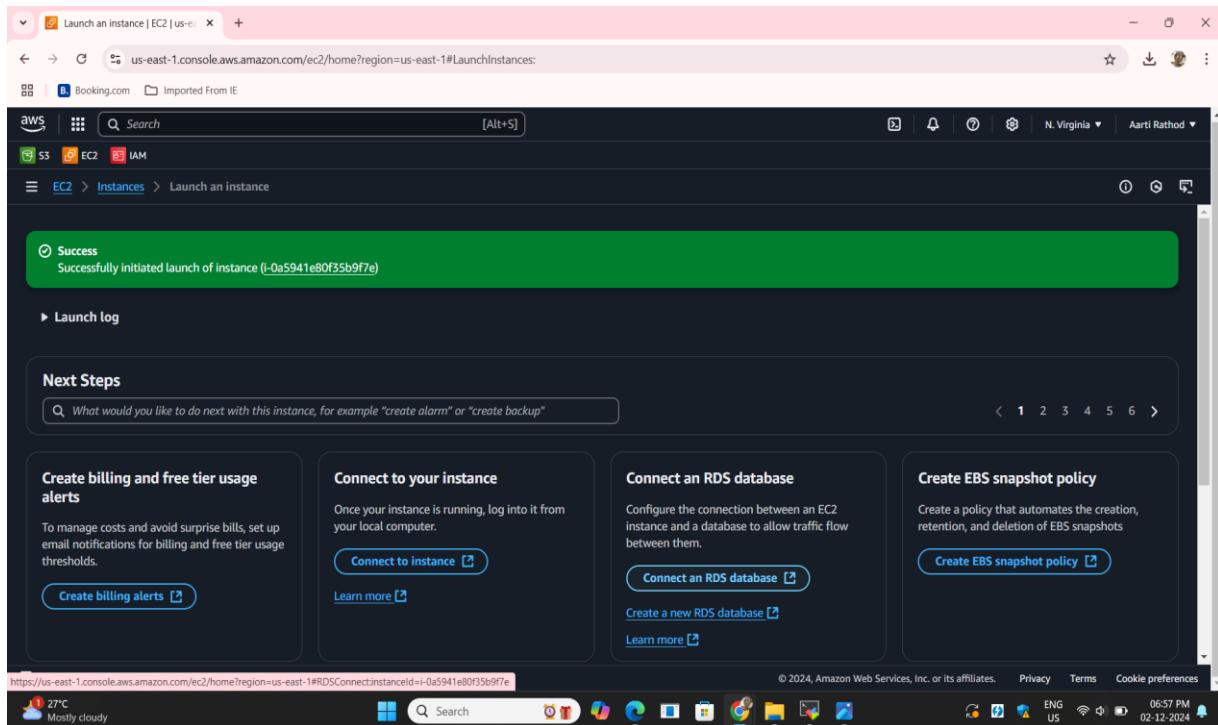
## Step 8: Add Storage

- Configure the storage for your instance:
- Root volume size (default is 8 GiB for AmazonLinux).
- Add additional volumes if required.
- Choose the storage type (e.g., General Purpose SSD).



## Step 9: Review and Launch

- Review all your configurations.
- If everything looks good, click **Launch**.



## Step 10 Instance to Launch

- You will be redirected to a confirmation page.
- Click **View Instances** to go to the EC2 Dashboard and monitor the status of your instance.

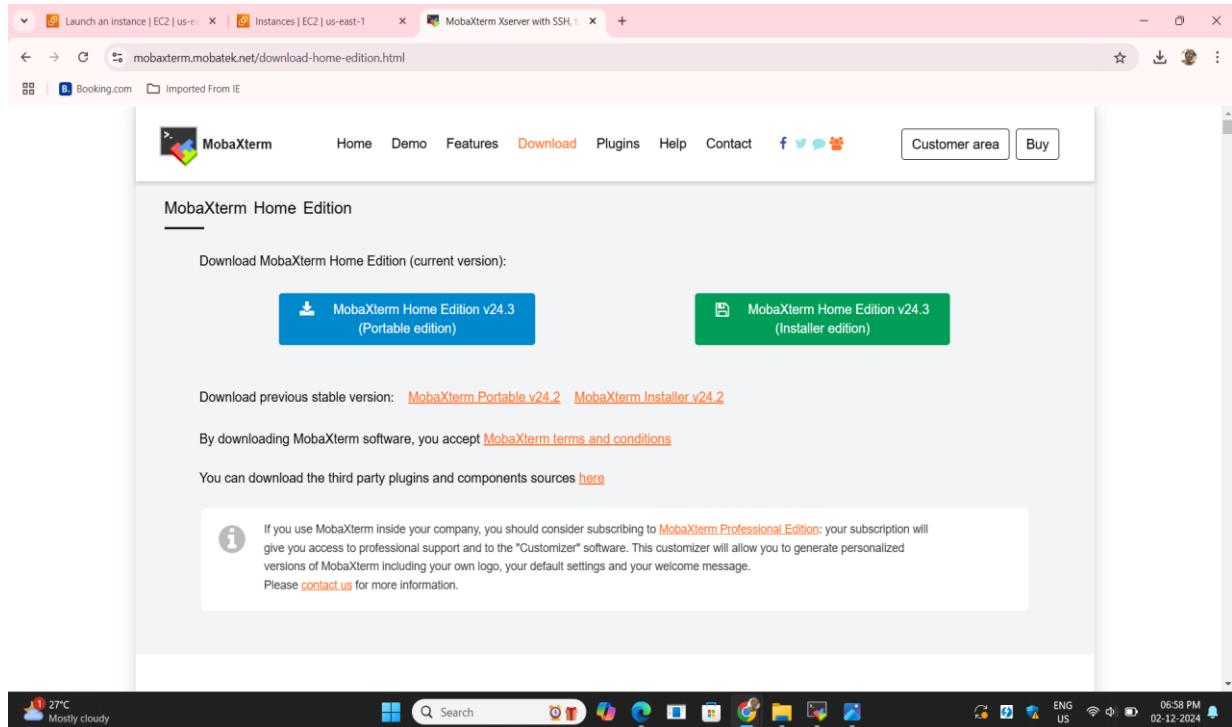
The screenshot shows the AWS EC2 Instances dashboard. The left sidebar is collapsed. The main area displays a table titled "Instances (1) Info" with one row. The row details a single instance:

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Pu
<input type="checkbox"/>	practice	i-0a5941e80f35b9f7e	Running	t2.micro	Initializing	View alarms +	us-east-1b	ec

Below the table, there is a section titled "Select an instance". The bottom right corner of the screen shows the AWS navigation bar with "CloudShell" and "Feedback" options, along with system status icons like battery level and network connection.

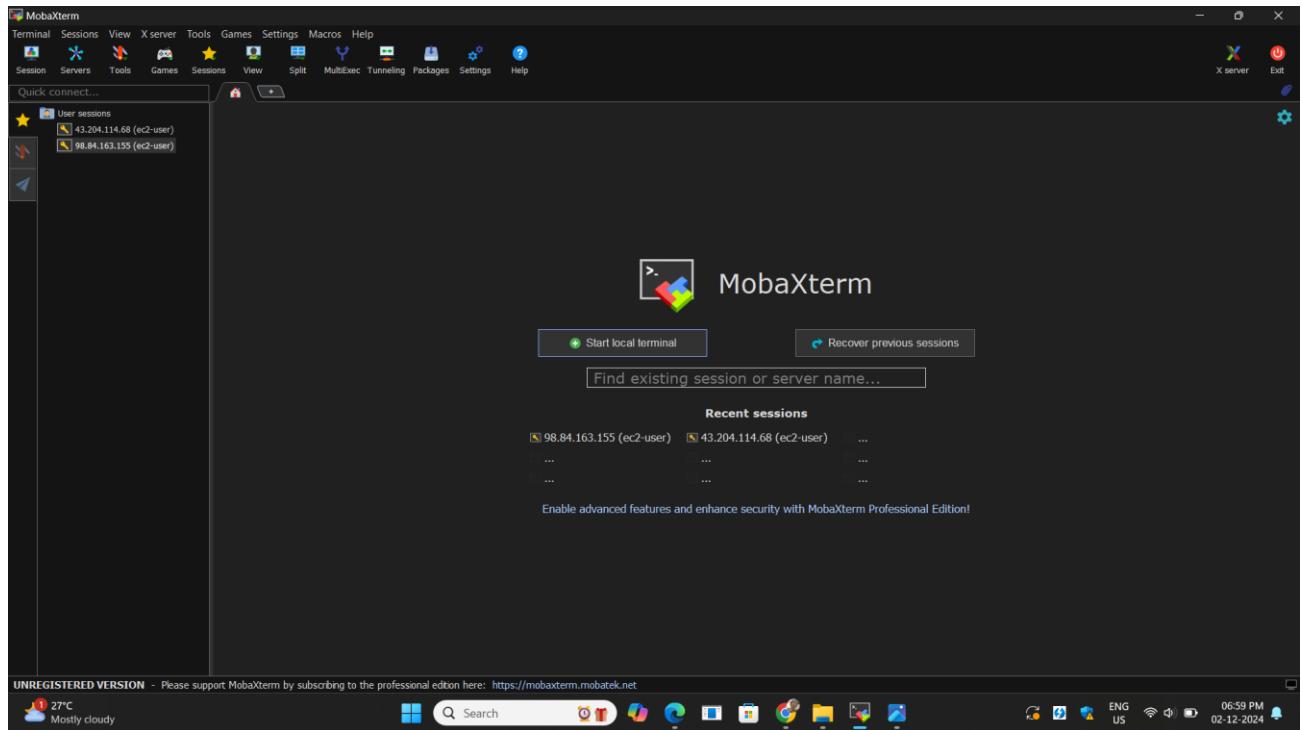
## Step 11: Download and Install MobXStream

- Visit the official [MobXStream website](#) or any trusted download source.
- Install the application by following the on-screen instructions.



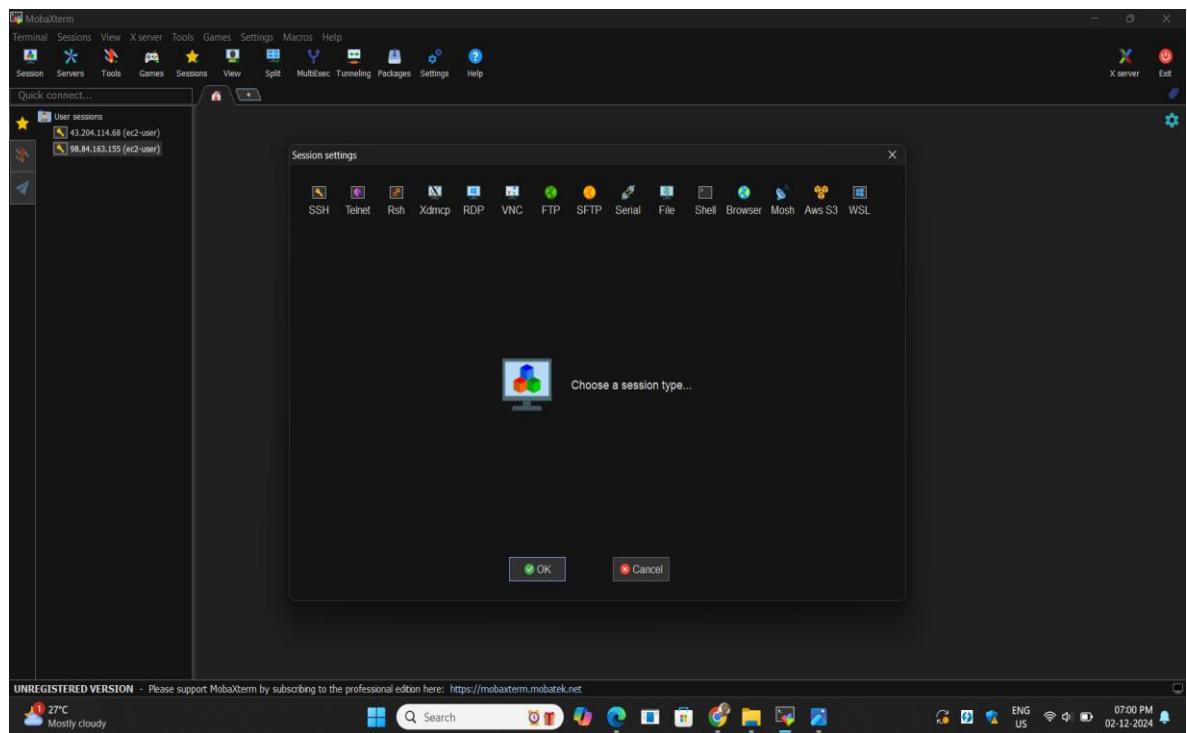
## Step 12: Launch MobXStream

- Open the installed MobXStream application on your computer.



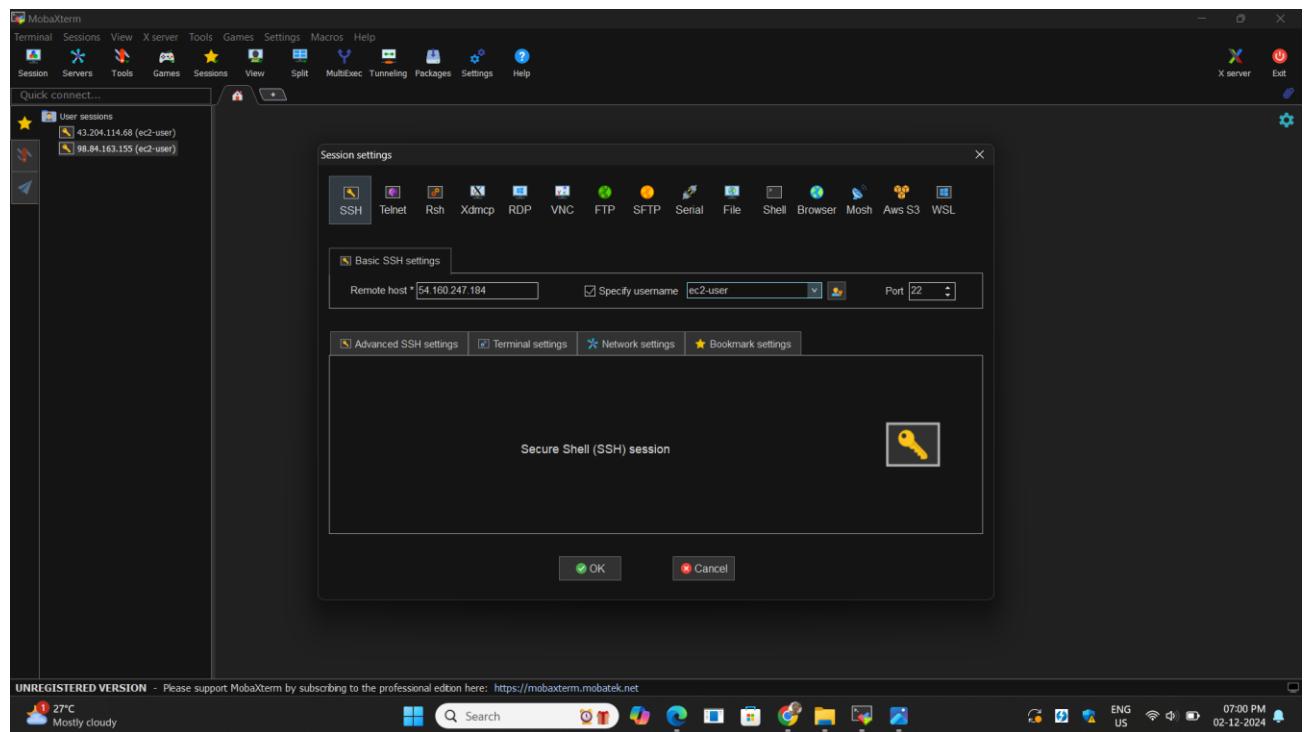
## Step 13: Add a New Session in MobXStream

- Open MobXStream and click on the **Session** menu.
- Select **New Session** or similar (varies by version).



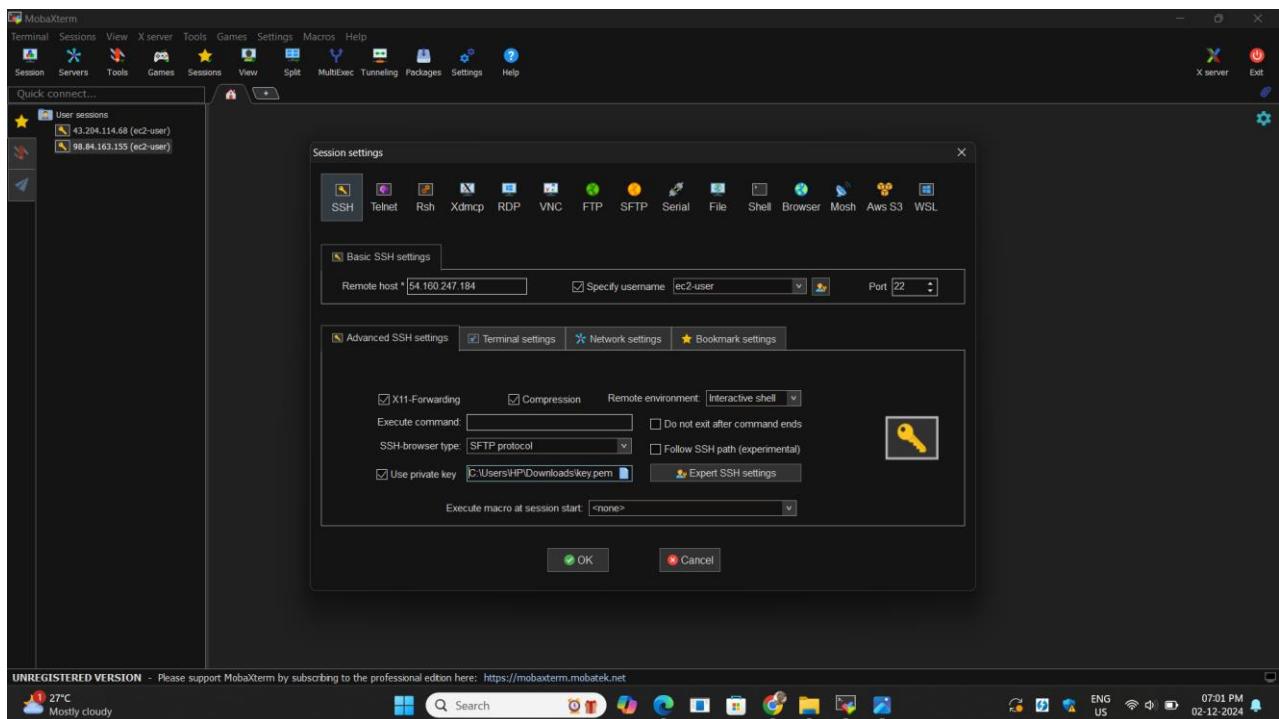
## Step 14: Configure SSH Connection

- In the session settings, enter the following:
- **Session Name:** Provide a descriptive name for your session (e.g., My AWS EC2).
- **Host Name or IP Address:** Enter the **Public IP** of your EC2 instance.
- **Port:** Set to **22** (default SSH port).
- **Protocol:** Select **SSH**.



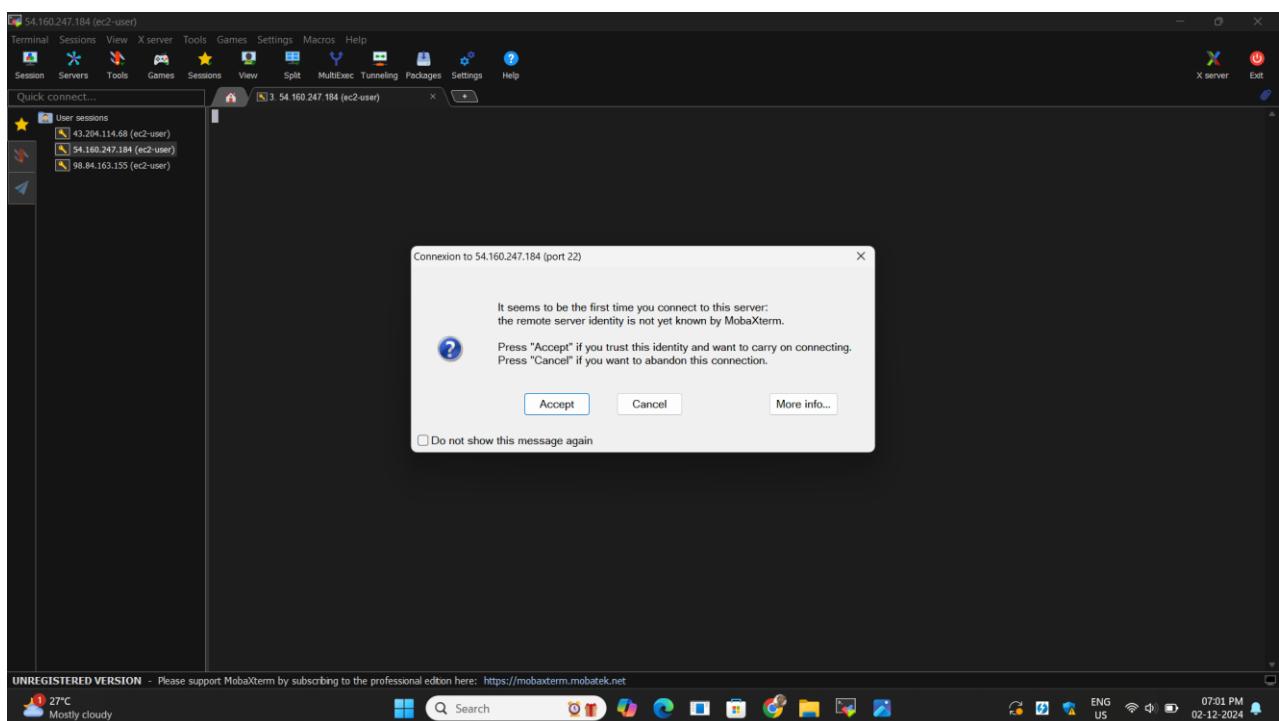
## Step 15: Authenticate with the Key Pair

- **Private Key File:** Browse and upload the .pem key pair file.

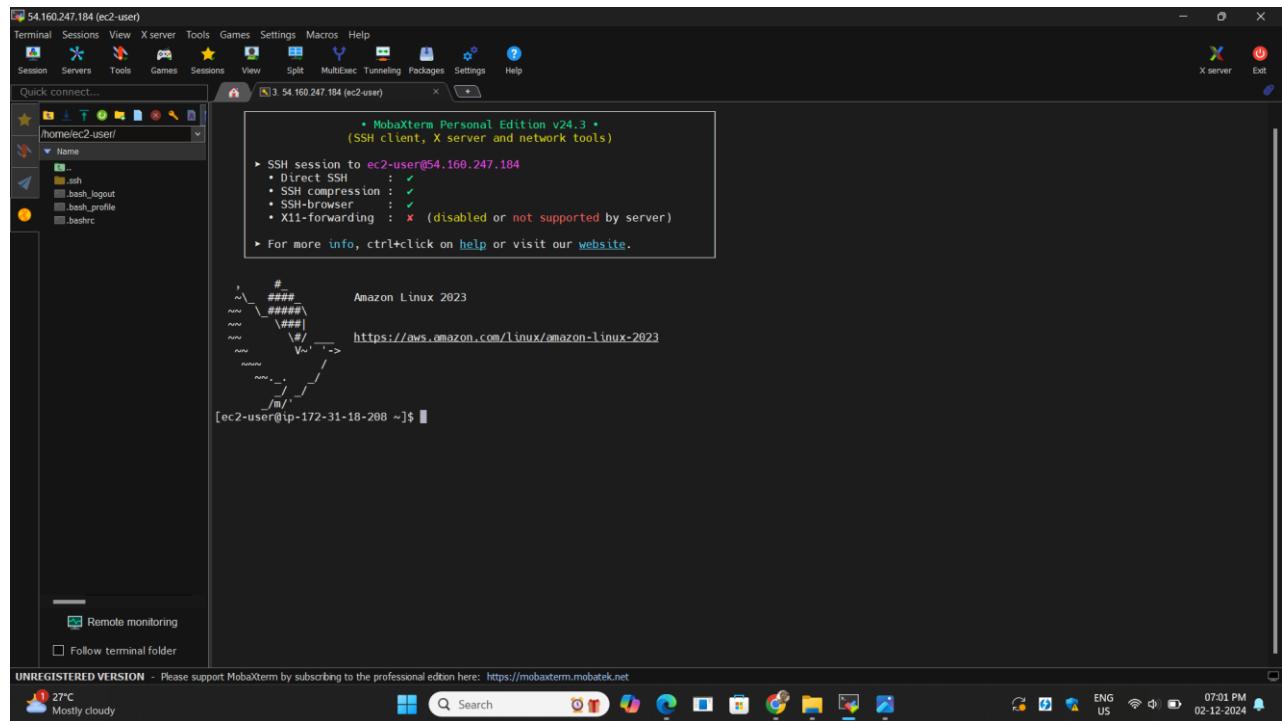


## Step 16: Save and Connect

- Save the session settings.
- Double-click the saved session to initiate the connection.

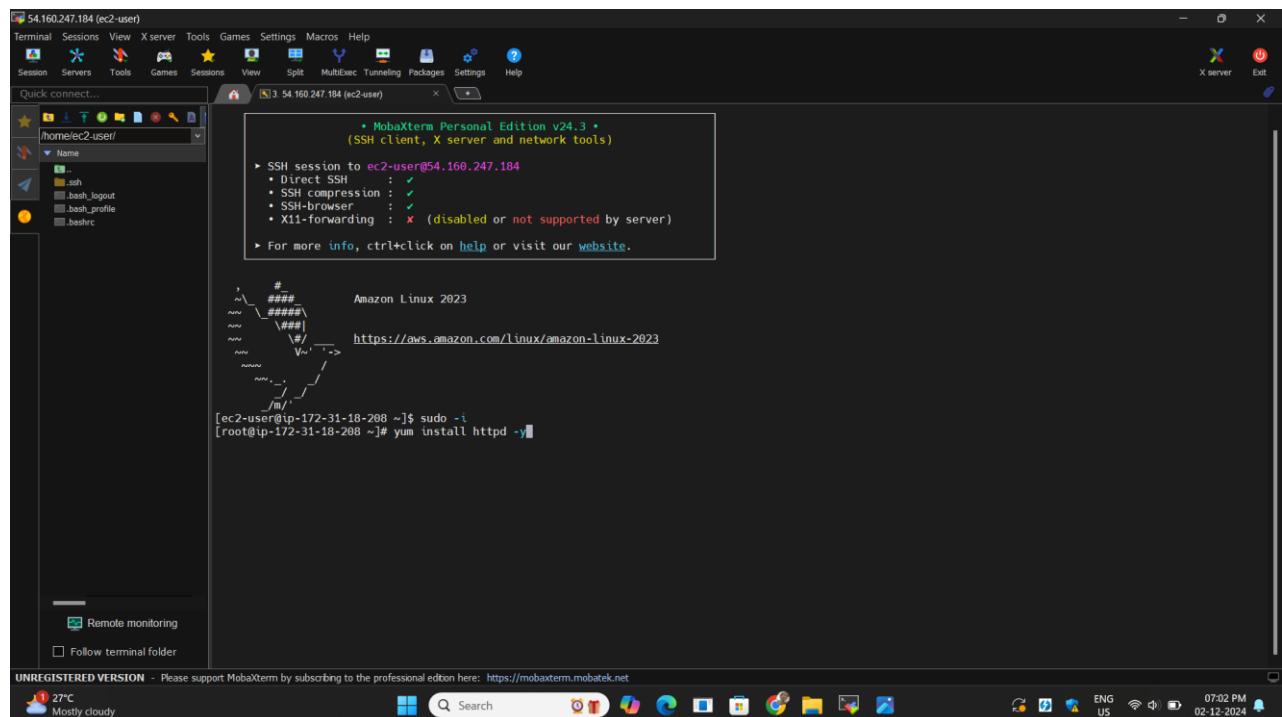


**Step 17:** Once connected, a terminal or remote desktop interface will appear (depending on your instance setup and MobXStream features).



**Step 18:** Update the instance and install Apache:

```
yum install httpd -y
```



## **Step 19: Install Apache Web Server**

- Start and enable Apache service: `systemctl start httpd` and `systemctl enable httpd`

The screenshot shows a MobaXterm window titled "3.54.160.247.184 (ec2-user)". The terminal session displays the following command output:

```
[root@ip-172-31-18-208 ~]# systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; disabled; preset: disabled)
     Active: inactive (dead)
       Docs: man:httpd.service(8)

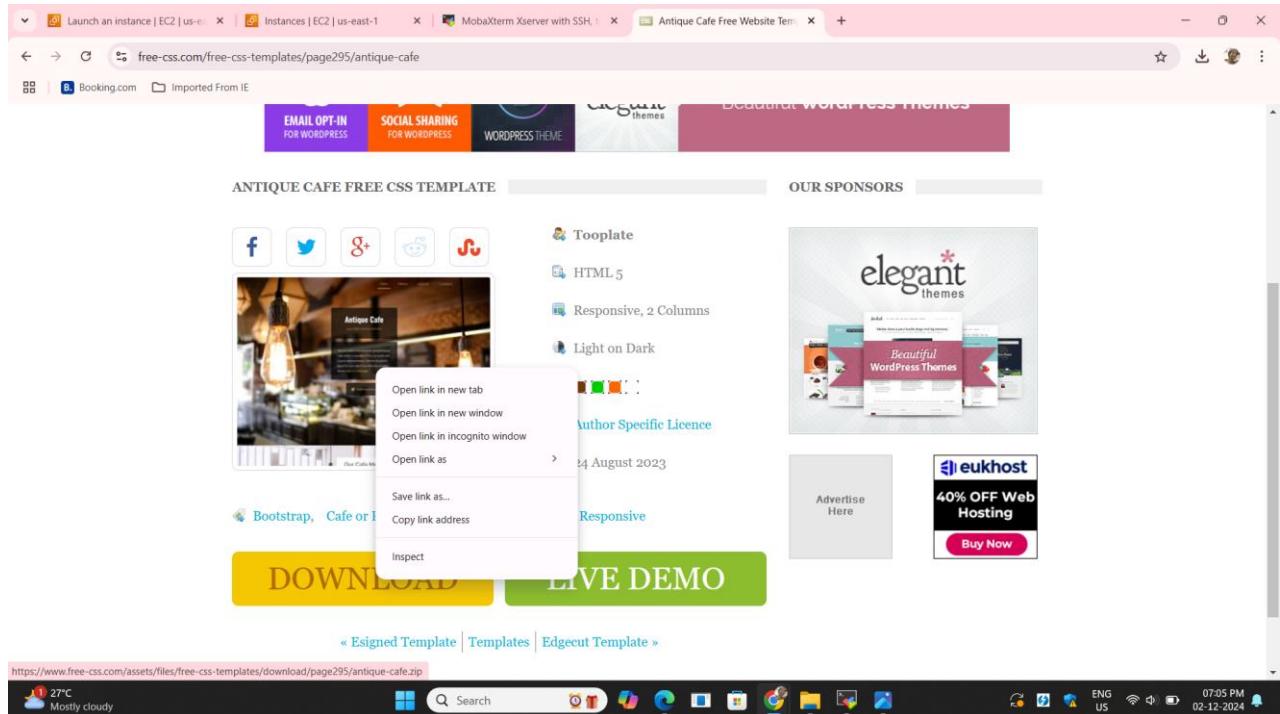
[root@ip-172-31-18-208 ~]# systemctl start httpd
[root@ip-172-31-18-208 ~]# systemctl enable httpd
Created symlink /etc/systemd/system/multi-user.target.wants/httpd.service → /usr/lib/systemd/system/httpd.service.
[root@ip-172-31-18-208 ~]# systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; preset: disabled)
     Active: active (running) since Mon 2024-12-02 13:33:45 UTC; 35s ago
       Docs: man:httpd.service(8)
     Main PID: 26679 (httpd)
       Status: "Total requests: 0; Idle/Busy workers 100/0;Requests/sec: 0; Bytes served/sec: 0 B/sec"
        Tasks: 177 (limit: 1111)
      Memory: 12.9M
        CPU: 82ms
      CGroup: /system.slice/httpd.service
           ├─26679 /usr/sbin/httpd -DFOREGROUND
           ├─26680 /usr/sbin/httpd -DFOREGROUND
           ├─26681 /usr/sbin/httpd -DFOREGROUND
           ├─26682 /usr/sbin/httpd -DFOREGROUND
           ├─26683 /usr/sbin/httpd -DFOREGROUND

Dec 02 13:33:45 ip-172-31-18-208.ec2.internal systemd[1]: Starting httpd.service - The Apache HTTP Server...
Dec 02 13:33:45 ip-172-31-18-208.ec2.internal systemd[1]: Started httpd.service - The Apache HTTP Server.
Dec 02 13:33:45 ip-172-31-18-208.ec2.internal httpd[26679]: Server configured, listening on: port 80
[root@ip-172-31-18-208 ~]#
```

The terminal window also shows the "Remote monitoring" and "Follow terminal folder" options at the bottom.

## Step 20: Download the Free CSS Template

- On your local machine, download a free static website template from websites like:



```
[root@ip-172-31-18-208 ~]# systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; disabled; preset: disabled)
   Active: inactive (dead)
     Docs: man:httpd.service(8)

[root@ip-172-31-18-208 ~]# systemctl start httpd
[root@ip-172-31-18-208 ~]# systemctl enable httpd
Created symlink /etc/systemd/system/multi-user.target.wants/httpd.service → /usr/lib/systemd/system/httpd.service.

[root@ip-172-31-18-208 ~]# systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; preset: disabled)
   Active: active (running) since Mon 2024-12-02 13:33:45 UTC; 35s ago
     Docs: man:httpd.service(8)
   Main PID: 26079 (httpd)
      Status: "Total requests: 0; Idle/Busy workers 100/0;Requests/sec: 0; Bytes served/sec: 0 B/sec"
      Tasks: 177 (limit: 1111)
     Memory: 12.9M
        CPU: 82ms
       CGroup: /system.slice/httpd.service
               ├─26079 /usr/sbin/httpd -DFOREGROUND
               ├─26080 /usr/sbin/httpd -DFOREGROUND
               ├─26081 /usr/sbin/httpd -DFOREGROUND
               ├─26082 /usr/sbin/httpd -DFOREGROUND
               └─26083 /usr/sbin/httpd -DFOREGROUND

Dec 02 13:33:45 ip-172-31-18-208.ec2.internal systemd[1]: Starting httpd.service - The Apache HTTP Server...
Dec 02 13:33:45 ip-172-31-18-208.ec2.internal systemd[1]: Started httpd.service - The Apache HTTP Server.
Dec 02 13:33:45 ip-172-31-18-208.ec2.internal httpd[26079]: Server configured, listening on: port 80
[root@ip-172-31-18-208 ~]# curl -O https://www.free-css.com/assets/files/free-css-templates/download/page295/antique-cafe.zip
```

The terminal session in MobaXterm shows the following steps:

- The user runs `systemctl status httpd` to check the status of the Apache service, which is currently inactive (dead).
- The user runs `systemctl start httpd` to start the service.
- The user runs `systemctl enable httpd` to enable it to start at boot.
- The user runs `systemctl status httpd` again to verify that the service is now active (running).
- The user runs `curl -O https://www.free-css.com/assets/files/free-css-templates/download/page295/antique-cafe.zip` to download the template file.

The system tray shows the date and time as 02-12-2024 07:05 PM.

```
[root@ip-172-31-18-208 ~]# systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; disabled; preset: disabled)
     Active: inactive (dead)
       Docs: man:httpd.service(8)

[root@ip-172-31-18-208 ~]# systemctl start httpd
[root@ip-172-31-18-208 ~]# systemctl enable httpd
Created symlink /etc/systemd/system/multi-user.target.wants/httpd.service → /usr/lib/systemd/system/httpd.service.

● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; preset: disabled)
     Active: active (running) since Mon 2024-12-02 13:33:45 UTC; 35s ago
       Docs: man:httpd.service(8)
         PID: 26079 (httpd)
        Status: "Total requests: 0; Idle/Busy workers 100/0;Requests/sec: 0; Bytes served/sec: 0 B/sec"
       Tasks: 177 (limit: 1111)
      Memory: 12.9M
        CPU: 82ms
      CGroup: /system.slice/httpd.service
              ├─26079 /usr/sbin/httpd -DFOREGROUND
              ├─26080 /usr/sbin/httpd -DFOREGROUND
              ├─26081 /usr/sbin/httpd -DFOREGROUND
              ├─26082 /usr/sbin/httpd -DFOREGROUND
              └─26083 /usr/sbin/httpd -DFOREGROUND

Dec 02 13:33:45 ip-172-31-18-208.ec2.internal systemd[1]: Starting httpd.service - The Apache HTTP Server...
Dec 02 13:33:45 ip-172-31-18-208.ec2.internal systemd[1]: Started httpd.service - The Apache HTTP Server.
Dec 02 13:33:45 ip-172-31-18-208.ec2.internal httpd[26079]: Server configured, listening on: port 80
[root@ip-172-31-18-208 ~]# curl -O https://www.freecss.css/assets/files/free-css-templates/download/page295/antique-cafe.zip
% Total    % Received   Xferd  Average Speed   Time   Time  Current
          Dload  Upload   Total Spent  Spent  Left  Speed
100 2165k  100 2165k    0     0  1792k      0  0:00:01  0:00:01  --:--:-- 1793k
[root@ip-172-31-18-208 ~]#
```

UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: <https://mobaxterm.mobatek.net>

Remote monitoring

Follow terminal folder

27°C Mostly cloudy

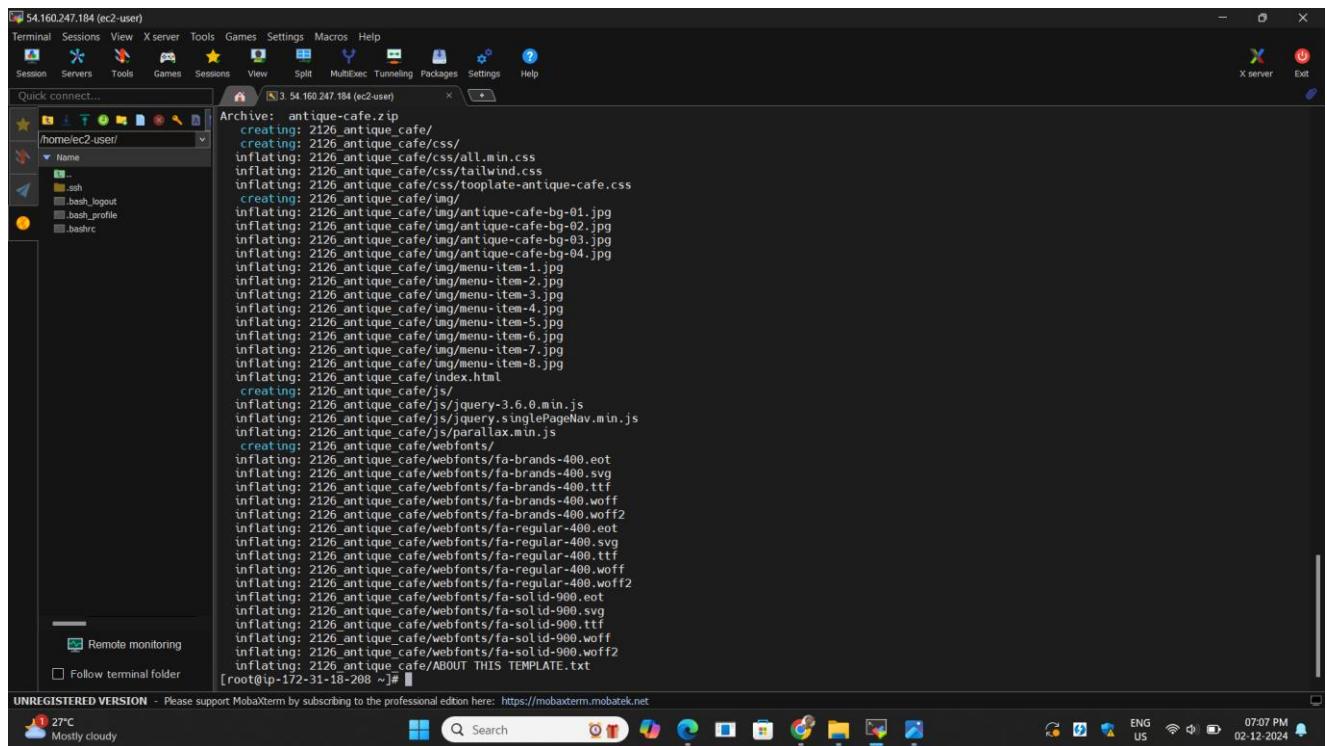
Search

ENG US

07:06 PM 02-12-2024

## Step 21: Extract the Template

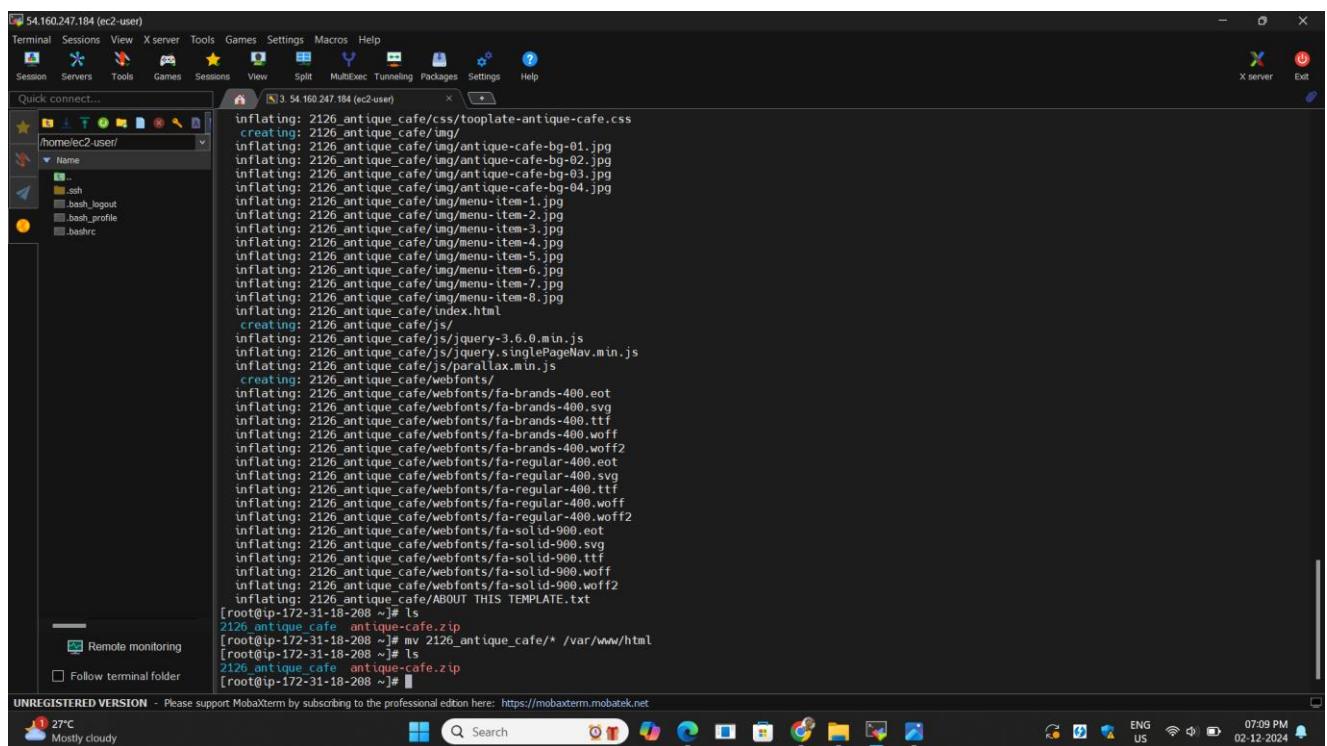
- Extract the .zip file on your local machine.
- Verify that the folder contains static files like:
  - index.html Folders for css, js, images, etc.



A screenshot of a MobaXterm terminal window titled "54.160.247.184 (ec2-user)". The terminal shows the command "unzip 2126\_antique\_cafe.zip" being run. The output of the command lists numerous files being created and inflated from the archive, including CSS files like "all.min.css", "tailwind.css", and "toplate-antique-cafe.css", and various image files such as "bg-01.jpg" through "bg-04.jpg". It also shows the creation of JavaScript files like "jquery-3.6.0.min.js" and "singlePageNav.min.js", and font files like "fa-brands-400.eot" and "fa-solid-900.svg". The session ends with the command "[root@ip-172-31-18-208 ~]#". The status bar at the bottom indicates an unregistered version and shows system information like "ENG US" and the date "02-12-2024".

```
Archive: 2126_antique_cafe.zip
creating: 2126_antique_cafe/
creating: 2126_antique_cafe/css/
inflating: 2126_antique_cafe/css/all.min.css
inflating: 2126_antique_cafe/css/tailwind.css
inflating: 2126_antique_cafe/css/toplate-antique-cafe.css
creating: 2126_antique_cafe/img/
inflating: 2126_antique_cafe/img/antique-cafe-bg-01.jpg
inflating: 2126_antique_cafe/img/antique-cafe-bg-02.jpg
inflating: 2126_antique_cafe/img/antique-cafe-bg-03.jpg
inflating: 2126_antique_cafe/img/antique-cafe-bg-04.jpg
inflating: 2126_antique_cafe/img/menu-item-1.jpg
inflating: 2126_antique_cafe/img/menu-item-2.jpg
inflating: 2126_antique_cafe/img/menu-item-3.jpg
inflating: 2126_antique_cafe/img/menu-item-4.jpg
inflating: 2126_antique_cafe/img/menu-item-5.jpg
inflating: 2126_antique_cafe/img/menu-item-6.jpg
inflating: 2126_antique_cafe/img/menu-item-7.jpg
inflating: 2126_antique_cafe/img/menu-item-8.jpg
inflating: 2126_antique_cafe/index.html
creating: 2126_antique_cafe/js/
inflating: 2126_antique_cafe/js/jquery-3.6.0.min.js
inflating: 2126_antique_cafe/js/jquery.singlePageNav.min.js
inflating: 2126_antique_cafe/js/parallax.min.js
creating: 2126_antique_cafe/webfonts/
inflating: 2126_antique_cafe/webfonts/fa-brands-400.eot
inflating: 2126_antique_cafe/webfonts/fa-brands-400.svg
inflating: 2126_antique_cafe/webfonts/fa-brands-400.ttf
inflating: 2126_antique_cafe/webfonts/fa-brands-400.woff
inflating: 2126_antique_cafe/webfonts/fa-brands-400.woff2
inflating: 2126_antique_cafe/webfonts/fa-regular-400.eot
inflating: 2126_antique_cafe/webfonts/fa-regular-400.svg
inflating: 2126_antique_cafe/webfonts/fa-regular-400.ttf
inflating: 2126_antique_cafe/webfonts/fa-regular-400.woff
inflating: 2126_antique_cafe/webfonts/fa-regular-400.woff2
inflating: 2126_antique_cafe/webfonts/fa-solid-900.eot
inflating: 2126_antique_cafe/webfonts/fa-solid-900.svg
inflating: 2126_antique_cafe/webfonts/fa-solid-900.ttf
inflating: 2126_antique_cafe/webfonts/fa-solid-900.woff
inflating: 2126_antique_cafe/webfonts/fa-solid-900.woff2
inflating: 2126_antique_cafe/ABOUT THIS TEMPLATE.txt
[root@ip-172-31-18-208 ~]#
```

UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: <https://mobaxterm.mobatek.net>



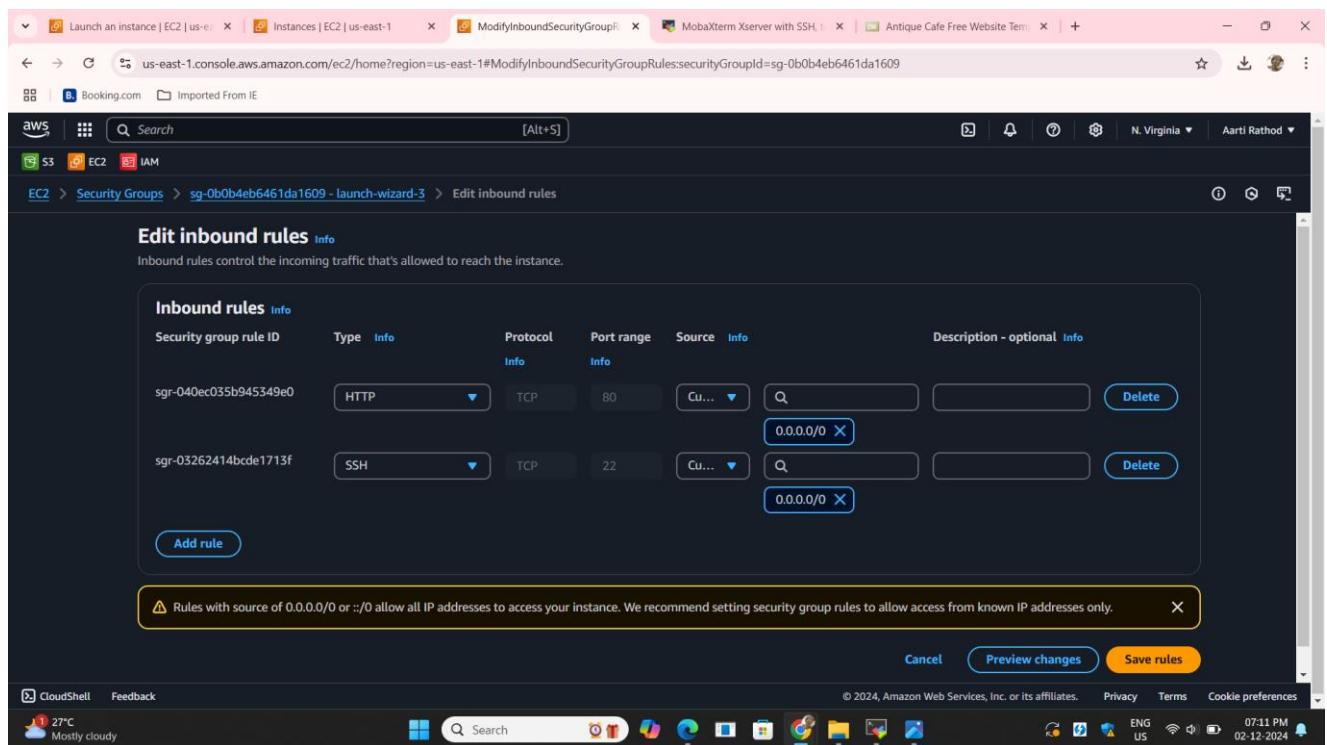
A screenshot of a MobaXterm terminal window titled "54.160.247.184 (ec2-user)". The terminal shows the command "ls" being run in the directory "2126\_antique\_cafe". The output lists several files and folders, including "antique-cafe.zip", "index.html", "css", "img", "js", and "webfonts". The session ends with the command "[root@ip-172-31-18-208 ~]#". The status bar at the bottom indicates an unregistered version and shows system information like "ENG US" and the date "02-12-2024".

```
inflating: 2126_antique_cafe/css/toplate-antique-cafe.css
creating: 2126_antique_cafe/img/
inflating: 2126_antique_cafe/img/antique-cafe-bg-01.jpg
inflating: 2126_antique_cafe/img/antique-cafe-bg-02.jpg
inflating: 2126_antique_cafe/img/antique-cafe-bg-03.jpg
inflating: 2126_antique_cafe/img/antique-cafe-bg-04.jpg
inflating: 2126_antique_cafe/img/menu-item-1.jpg
inflating: 2126_antique_cafe/img/menu-item-2.jpg
inflating: 2126_antique_cafe/img/menu-item-3.jpg
inflating: 2126_antique_cafe/img/menu-item-4.jpg
inflating: 2126_antique_cafe/img/menu-item-5.jpg
inflating: 2126_antique_cafe/img/menu-item-6.jpg
inflating: 2126_antique_cafe/img/menu-item-7.jpg
inflating: 2126_antique_cafe/img/menu-item-8.jpg
inflating: 2126_antique_cafe/index.html
creating: 2126_antique_cafe/js/
inflating: 2126_antique_cafe/js/jquery-3.6.0.min.js
inflating: 2126_antique_cafe/js/jquery.singlePageNav.min.js
inflating: 2126_antique_cafe/js/parallax.min.js
creating: 2126_antique_cafe/webfonts/
inflating: 2126_antique_cafe/webfonts/fa-brands-400.eot
inflating: 2126_antique_cafe/webfonts/fa-brands-400.svg
inflating: 2126_antique_cafe/webfonts/fa-brands-400.ttf
inflating: 2126_antique_cafe/webfonts/fa-brands-400.woff
inflating: 2126_antique_cafe/webfonts/fa-brands-400.woff2
inflating: 2126_antique_cafe/webfonts/fa-regular-400.eot
inflating: 2126_antique_cafe/webfonts/fa-regular-400.svg
inflating: 2126_antique_cafe/webfonts/fa-regular-400.ttf
inflating: 2126_antique_cafe/webfonts/fa-regular-400.woff
inflating: 2126_antique_cafe/webfonts/fa-regular-400.woff2
inflating: 2126_antique_cafe/webfonts/fa-solid-900.eot
inflating: 2126_antique_cafe/webfonts/fa-solid-900.svg
inflating: 2126_antique_cafe/webfonts/fa-solid-900.ttf
inflating: 2126_antique_cafe/webfonts/fa-solid-900.woff
inflating: 2126_antique_cafe/webfonts/fa-solid-900.woff2
inflating: 2126_antique_cafe/ABOUT THIS TEMPLATE.txt
[root@ip-172-31-18-208 ~]# ls
2126_antique_cafe antique-cafe.zip
[root@ip-172-31-18-208 ~]# mv 2126_antique_cafe/* /var/www/html
[root@ip-172-31-18-208 ~]# ls
2126_antique_cafe antique-cafe.zip
[root@ip-172-31-18-208 ~]#
```

UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: <https://mobaxterm.mobatek.net>

## Step 22: Steps to Add HTTP Inbound Rule

1. **Go to Security Groups** ○ From the EC2 Dashboard, click **Security Groups** in the left-hand menu.
2. **Select Your Security Group** ○ Find and select the Security Group associated with your EC2 instance.
3. **Edit Inbound Rules** ○ Click on the **Inbound Rules** tab and then click the **Edit inbound rules** button.
4. **Add HTTP Rule**
  - Click **Add Rule** and configure:
    - **Type:** HTTP
    - **Protocol:** TCP
    - **Port Range:** 80
    - **Source:** Anywhere (0.0.0.0/0) or My IP (for restricted access).



## Step 22: Copy the Public IP address from instance details paste to the other new tab:

The screenshot shows the AWS EC2 Instances page. In the left sidebar, under 'Instances', 'Instances' is selected. The main table lists three instances: 'practice' (running, t2.micro, 2/2 checks passed), 'From AMI' (running, t2.micro, 2/2 checks passed), and another 'practice' instance (running, t2.micro, 2/2 checks passed). The second 'practice' instance is highlighted. On the right, the details for this instance are shown. Under 'Networking', the 'Public IPv4 address' section displays '54.160.247.184 | open address'. A tooltip 'Public IPv4 address copied' appears over this address. Other network details include a private IP of 172.31.18.208 and a public DNS name of ec2-54-160-247-184.compute-1.amazonaws.com.

## Step 23: View the Website Host of Website

