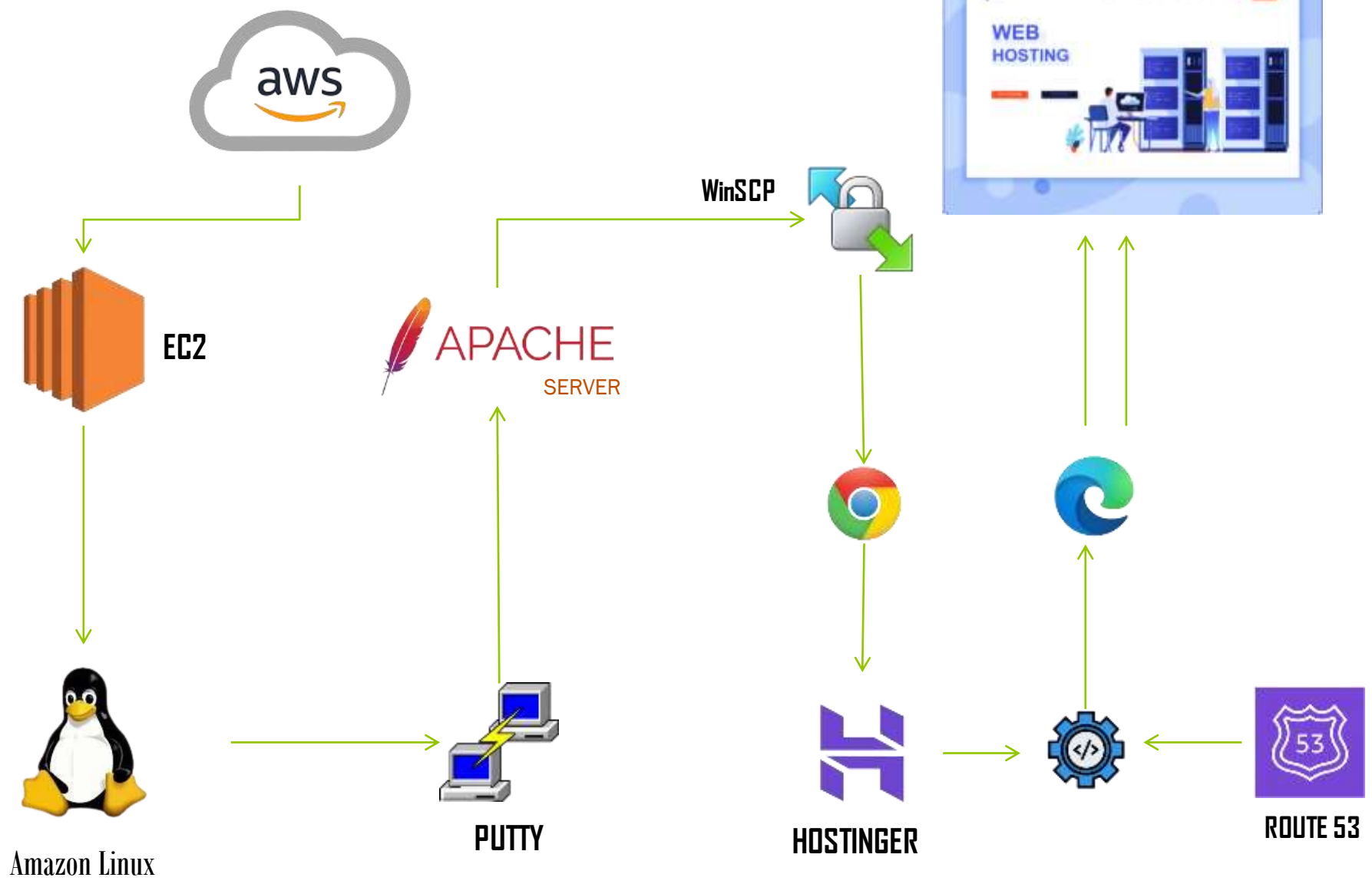


HOSTING A **STATIC** WEBSITE **USING** AWS



ARCHITECTURE :-



EXPLANATION :

Hosting a static Webpage With the help of Amazon web service (AWS) . For this Project the services we are going to use is Elastic compute Cloud (Ec2) which is used To Run Multiple different Operating System (OS) remotely at low cost ,So here we are Going to Run the Amazon Linux and install the Apache server for webpage hosting . Apache is a HTTP Server it is widely used to deliver web content over the internet . Meanwhile it is Open source Software .Then With the help of tool WinSCP we are Going to Transfer the Assest From windows to Linux , Here WinSCP is Basically use to Transfer the File among different OS . Route 53 This service is used particularly for Private Domain Configuring , Here we are going to Purchase a Private domain Using Hostinger Platform and configuring the Purchased domain with the Route 53 Service to reduce the server downtime we are going to add Routing policies .



TECHNOLOGY USED :



Amazon Web Service



HOSTINGER



HTML



EC2



Amazon Linux



WinSCP



Route 53

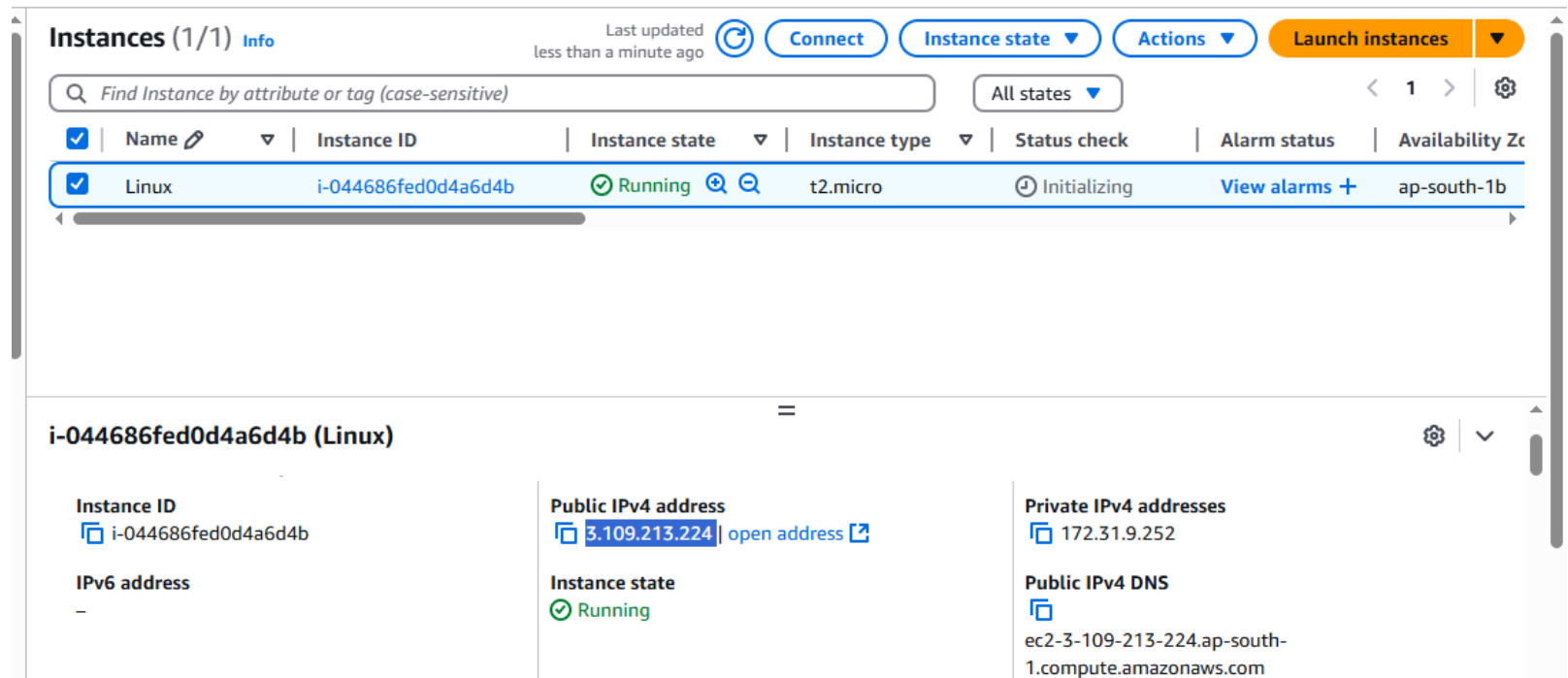
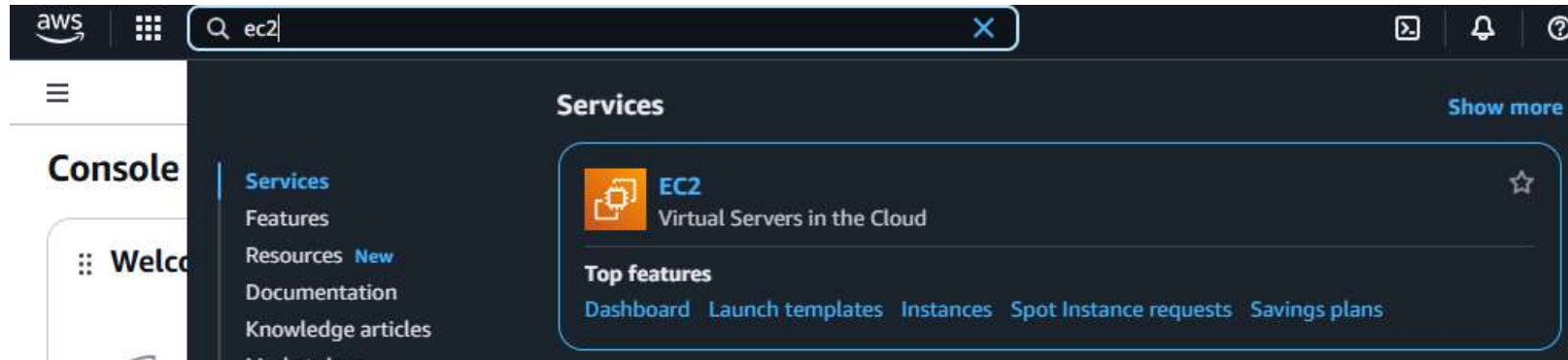


PUTTY



**APACHE
SERVER**

WORKING SAMPLE :



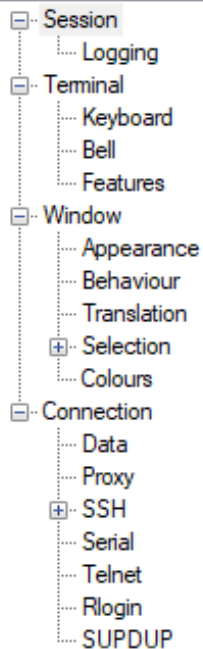


PuTTY Configuration

?



Category:



Basic options for your PuTTY session

Specify the destination you want to connect to

Host Name (or IP address)

Port

3.109.213.224

22

Connection type:

☒ SSH ☐ Serial ☐ Other:

- Load, save or delete a stored session

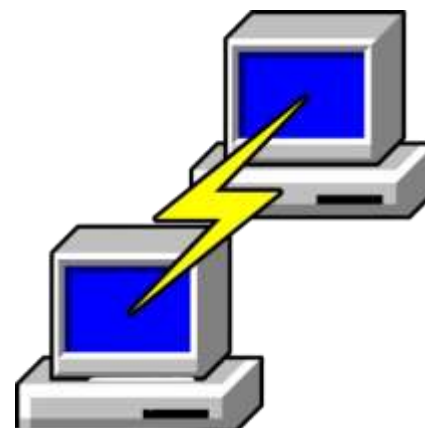
Saved Sessions

Default Settings

Load

Save

Delete



```
login as: ec2-user
```

```
Authenticating with public key "NEWKEY"
```

A complex diagram of a neural network architecture. It shows a series of layers of nodes connected by arrows. The top layer has 1 node, followed by layers of 3, 4, 4, 3, and 2 nodes. The bottom layer has 1 node. The connections are labeled with various symbols like '#', 'V', and 'm'.

Amazon Linux 2023

<https://aws.amazon.com/linux/amazon-linux-2023>

```
[ec2-user@ip-172-31-9-252 ~]$ cd /
[ec2-user@ip-172-31-9-252 /]$
```



APACHE INSTALLATION

| | | |
|--------------------------------------|---|--------------------------------------|
| <code>sudo -i</code> | → | Changing as Root User |
| <code>cd /</code> | → | Change Directory |
| <code>Yum install httpd -y</code> | → | Installing Apache |
| <code>systemctl start httpd</code> | → | Starting Apache server |
| <code>systemctl status httpd</code> | → | Status check for apache |
| <code>Chmod 777 /var/html/www</code> | → | File Permission for apache directory |
| <code>Touch index.html</code> | → | File contain source code |



APACHE INSTALLATION :

```
root@ip-172-31-15-126:/
[root@ip-172-31-15-126 /]# systemctl start httpd
[root@ip-172-31-15-126 /]# systemctl status httpd
• httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; disabled; preset: disabled)
   Active: active (running) since Sat 2025-03-15 07:47:55 UTC; 35s ago
     Docs: man:httpd.service(8)
  Main PID: 25872 (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
```

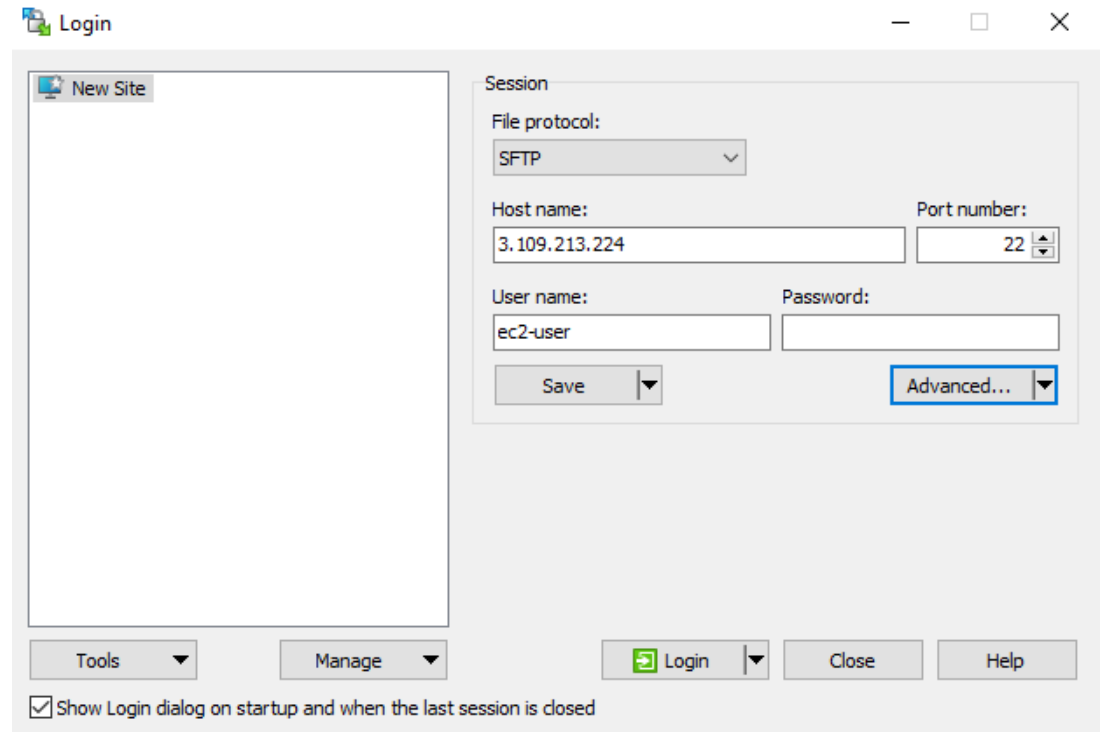
FILE PERMISSION :

```
[root@ip-172-31-9-252 var]# ls
account  adm  cache  db  empty  ftp  games  kerberos  lib  loca
[root@ip-172-31-9-252 var]# cd www
[root@ip-172-31-9-252 www]# ls
cgi-bin  html
[root@ip-172-31-9-252 www]# cd html
[root@ip-172-31-9-252 html]# chmod 777 /var/www/html
```

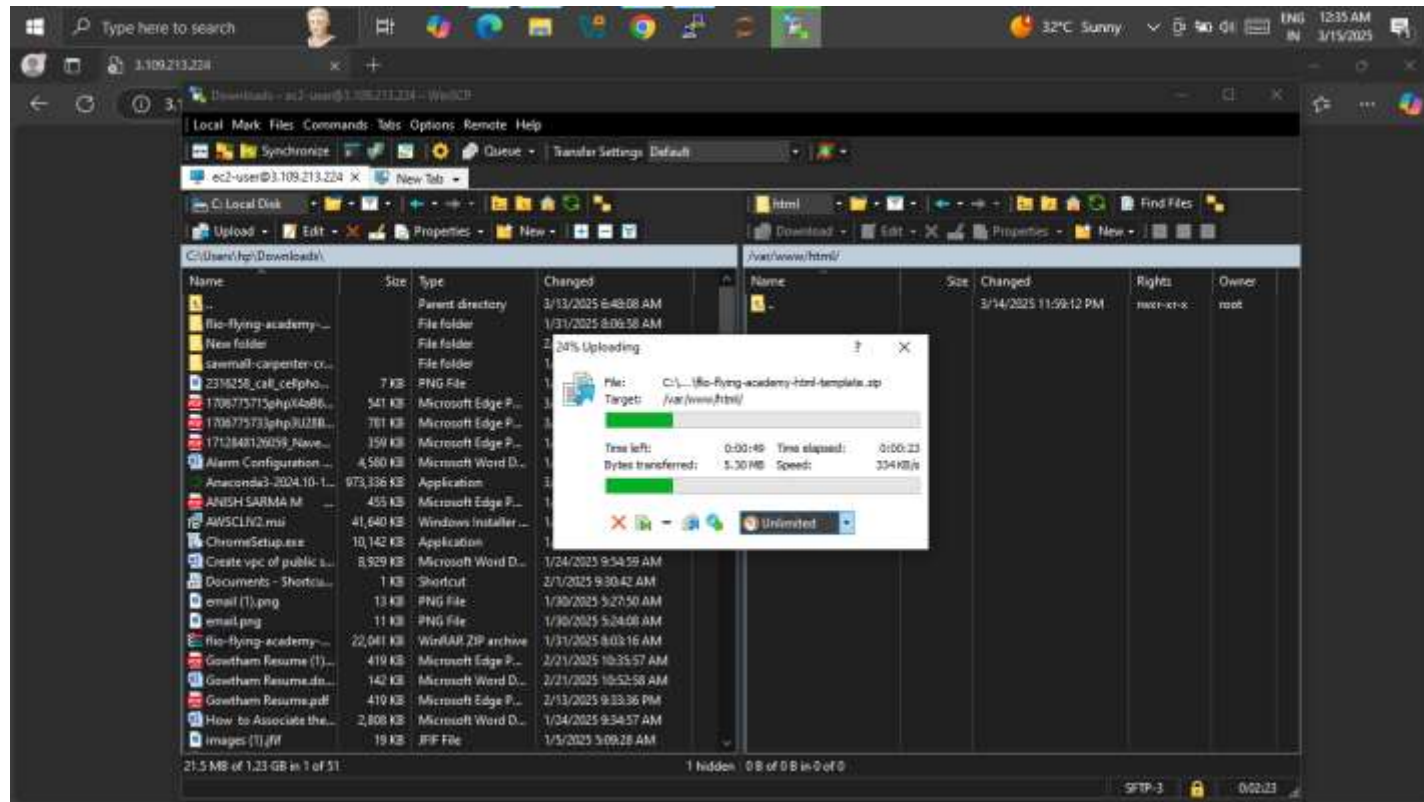


CONNECTING WINSCP

- WinScp is a software used to Transfer data and files among different OS without any difficulties.
- WinScp in connect to the specific OS through IP address and Security key,



SOURCE CODE TRANSFER VIA WINSCP



SOURCE CODE

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
<meta charset="UTF-8" />
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
```

```
<title>Vels University - Home</title>
```

```
<!-- Google Fonts -->
```

```
<link href="https://fonts.googleapis.com/css2?family=Poppins:wght@400;600&display=swap"  
      rel="stylesheet">
```

```
<link href="https://fonts.googleapis.com/css2?family=Cinzel:wght@700&display=swap"  
      rel="stylesheet">
```



```
<style>
* {
  margin: 0;
  padding: 0;
  box-sizing: border-box;
  font-family: 'Poppins', sans-serif;
}

body {
  background-color: #000000;
  color: #ffffff;
  font-size: 16px;
  line-height: 1.6;
}

header {
  background-color: #111111;
  padding: 20px;
  text-align: center;
  box-shadow: 0 2px 5px rgba(255, 165, 0, 0.2);
}

.logo {
  max-width: 200px;
  height: auto;
  margin-bottom: 20px;
}
```



```
@keyframes fadeInSlideUp {  
  0% {  
    opacity: 0;  
    transform: translateY(30px);  
  }  
  
  100% {  
    opacity: 1;  
    transform: translateY(0);  
  }  
}  
  
.welcome-message {  
  background-color: #ff6600;  
  padding: 50px 20px;  
  text-align: center;  
  opacity: 0;  
  animation: fadeInSlideUp 2s ease-out forwards;  
}
```



```
.aws-title {  
  font-family: 'Cinzel', serif;  
  font-weight: 700;  
  letter-spacing: 1px;  
  font-size: 2.8em;  
  text-transform: uppercase;  
  margin-bottom: 20px;  
  color: #000000;  
}
```

```
.nav-bar {  
  background-color: #222222;  
  padding: 15px;  
  text-align: center;  
  display: flex;  
  justify-content: center;  
  gap: 15px;  
  flex-wrap: wrap;  
}
```



```
.nav-bar a {  
  color: #ffffff;  
  background-color: #ff6600;  
  padding: 10px 20px;  
  text-decoration: none;  
  border-radius: 5px;  
  font-weight: 600;  
  font-size: 1em;  
  transition: background-color 0.3s, color 0.3s;  
  display: inline-block;  
  cursor: pointer;  
}
```

```
.nav-bar a:hover {  
  background-color: #ffa347;  
  color: #000;  
}  
.content {  
  display: none;  
  padding: 30px;  
  background-color: #111111;  
  border-top: 2px solid #ff6600;  
}
```



```
.content.active {  
  display: block;  
  animation: slideFade 1s ease;  
}
```

```
@keyframes slideFade {  
  0% {  
    opacity: 0;  
    transform: translateY(20px);  
  }
```

```
  100% {  
    opacity: 1;  
    transform: translateY(0);  
  }  
}
```



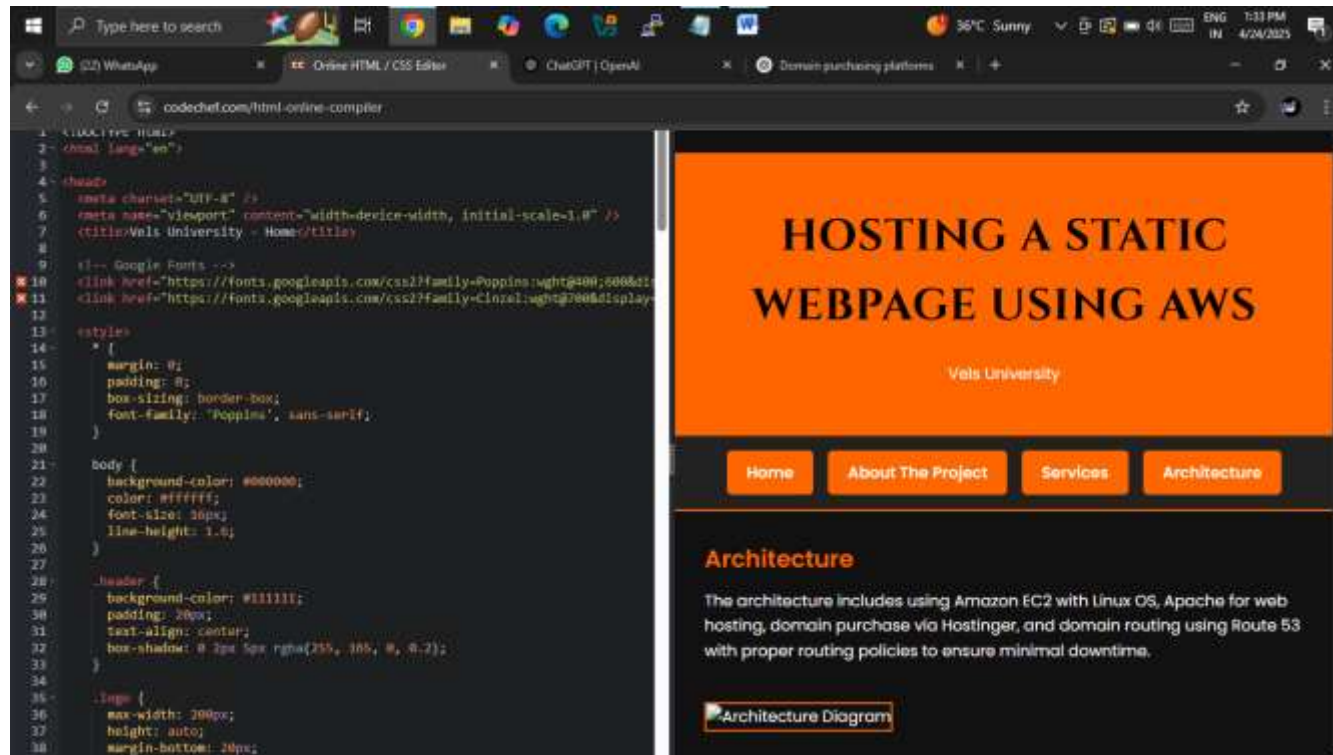

```
pre {  
  background-color: #222222;  
  padding: 10px;  
  border-left: 4px solid #ff6600;  
  overflow-x: auto;  
}
```

```
.architecture-image {  
  width: 100%;  
  max-width: 800px;  
  height: auto;  
  border: 2px solid #ff6600;  
  margin-top: 20px;  
}
```

```
.tool-icons {  
  display: flex;  
  flex-wrap: wrap;  
  justify-content: center;  
  gap: 20px;  
  margin-top: 20px;  
}
```

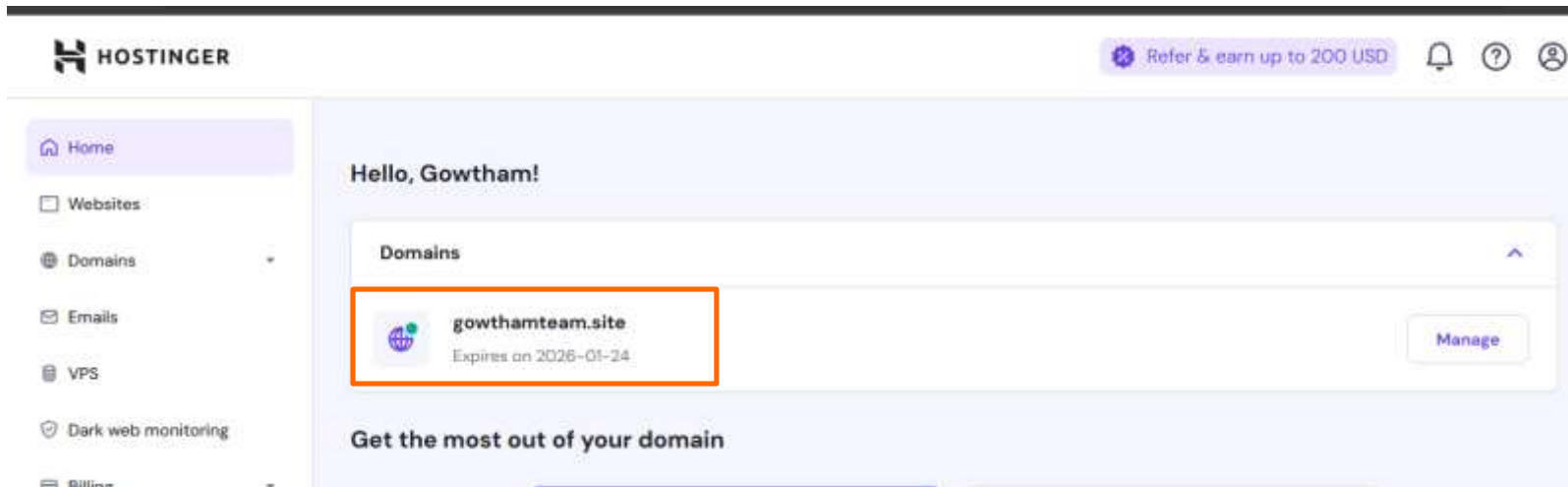


TEST PAGE :



PRIVATE DOMAIN :

Purchasing Private Domain “gowthamteam.site” from hostinger



CONFIGURING PRIVATE DOMAIN VIA ROUTE 53

The screenshot displays the AWS Route 53 console interface. At the top, a green notification banner states: "gowthamteam.site was successfully created. Now you can create records in the hosted zone to specify how you want Route 53 to route traffic for your domain." Below this, the "Records (1/2)" section shows a table of existing records. The table has columns for Record, Type, Routing policy, Differ..., Alias, and Value/Route traffic. Two records are listed: an NS record for "gowthamteam.site" and an SOA record for "gowthamteam.site". The NS record is selected, and its details are shown on the right. The record details include the Record name "gowthamteam.site", Record type "NS", Value "ns-1536.awsdns-00.co.uk, ns-0.awsdns-00.com, ns-1024.awsdns-00.org, ns-512.awsdns-00.net", Alias "No", TTL (seconds) "172800", and Routing policy "Simple".

Route 53

- Dashboard
- Hosted zones**
- Health checks
- Profiles [New](#)
- ▼ **IP-based routing**
 - CIDR collections
- ▼ **Traffic flow**
 - Traffic policies
 - Policy records
- ▼ **Domains**
 - Registered domains
 - Requests
- ▼ **Resolver**
 - VPCs
 - Inbound endpoints

Records (1/2) [info](#)

Now you can create records in the hosted zone to specify how you want Route 53 to route traffic for your domain.

[Delete record](#) [Import zone file](#) [Create record](#)

Filter records by property or: [Type](#) [Routing policy](#) [Alias](#)

| Record | Type | Routing policy | Differ... | Alias | Value/Route traffic |
|--|------|----------------|-----------|-------|--|
| <input checked="" type="checkbox"/> gowthamteam.site | NS | Simple | - | No | ns-1536.awsdns-00.co.uk, ns-0.awsdns-00.com, ns-1024.awsdns-00.org, ns-512.awsdns-00.net |
| <input type="checkbox"/> gowthamteam.site | SOA | Simple | - | No | ns-1536.awsdns-00.co.uk |

Record details [Edit record](#)

Record name: gowthamteam.site

Record type: NS

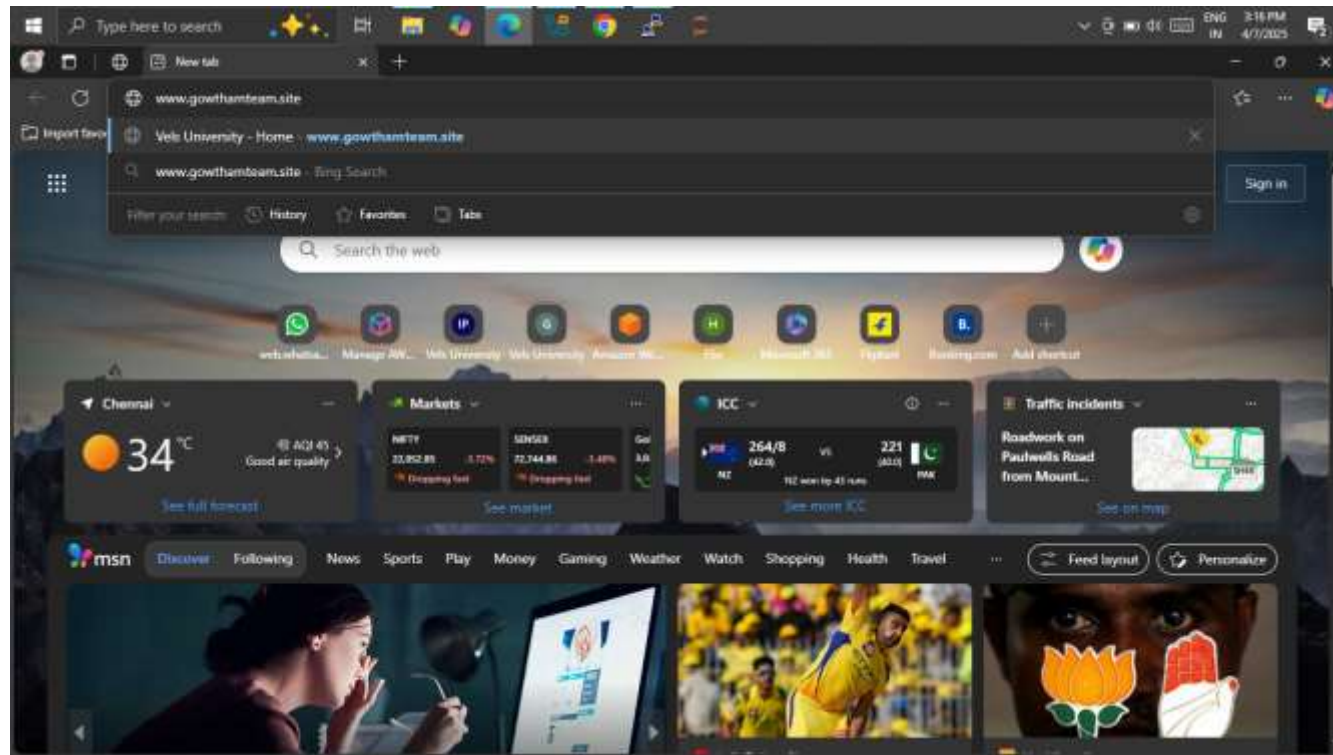
Value: ns-1536.awsdns-00.co.uk, ns-0.awsdns-00.com, ns-1024.awsdns-00.org, ns-512.awsdns-00.net

Alias: No

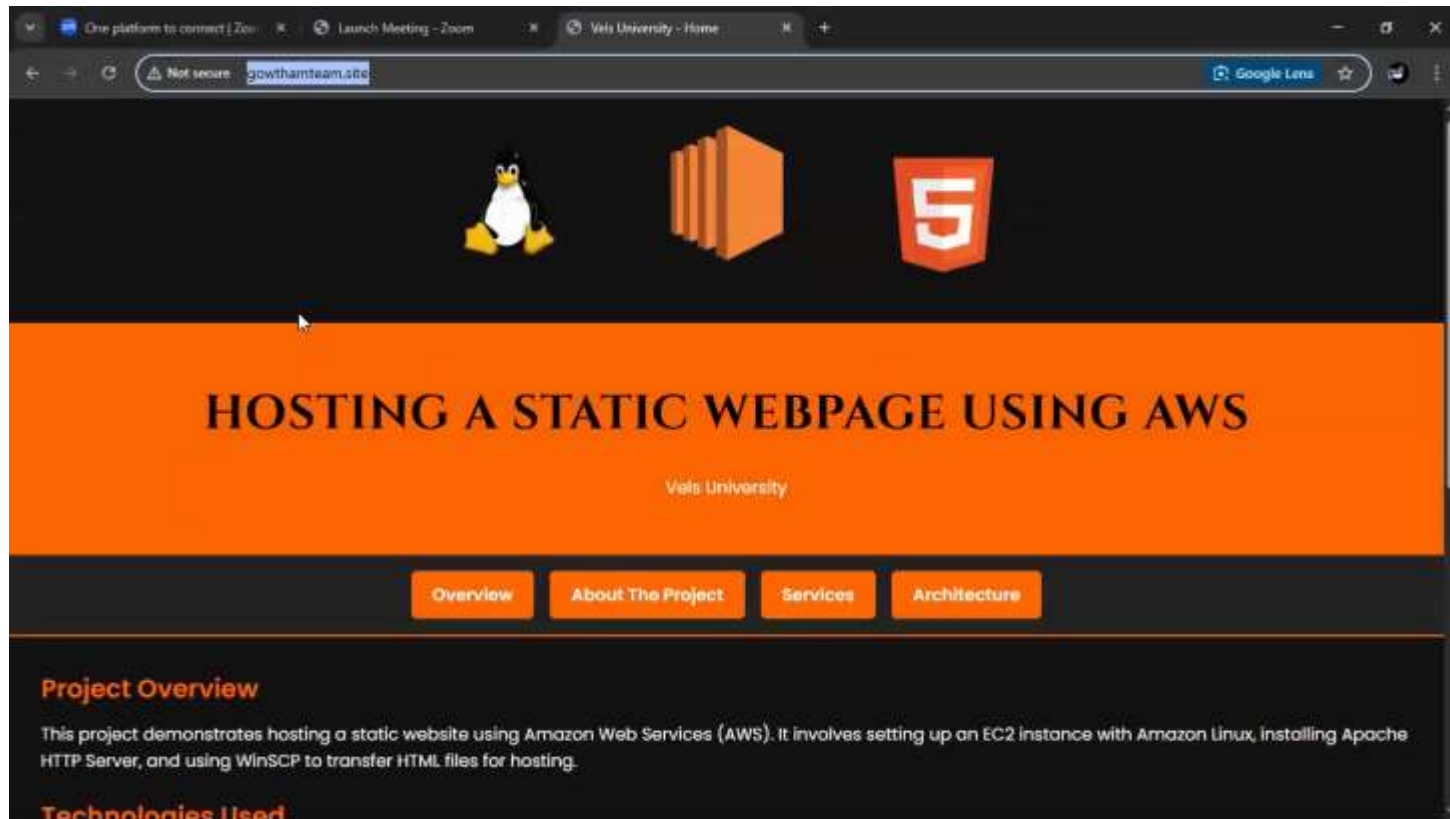
TTL (seconds): 172800

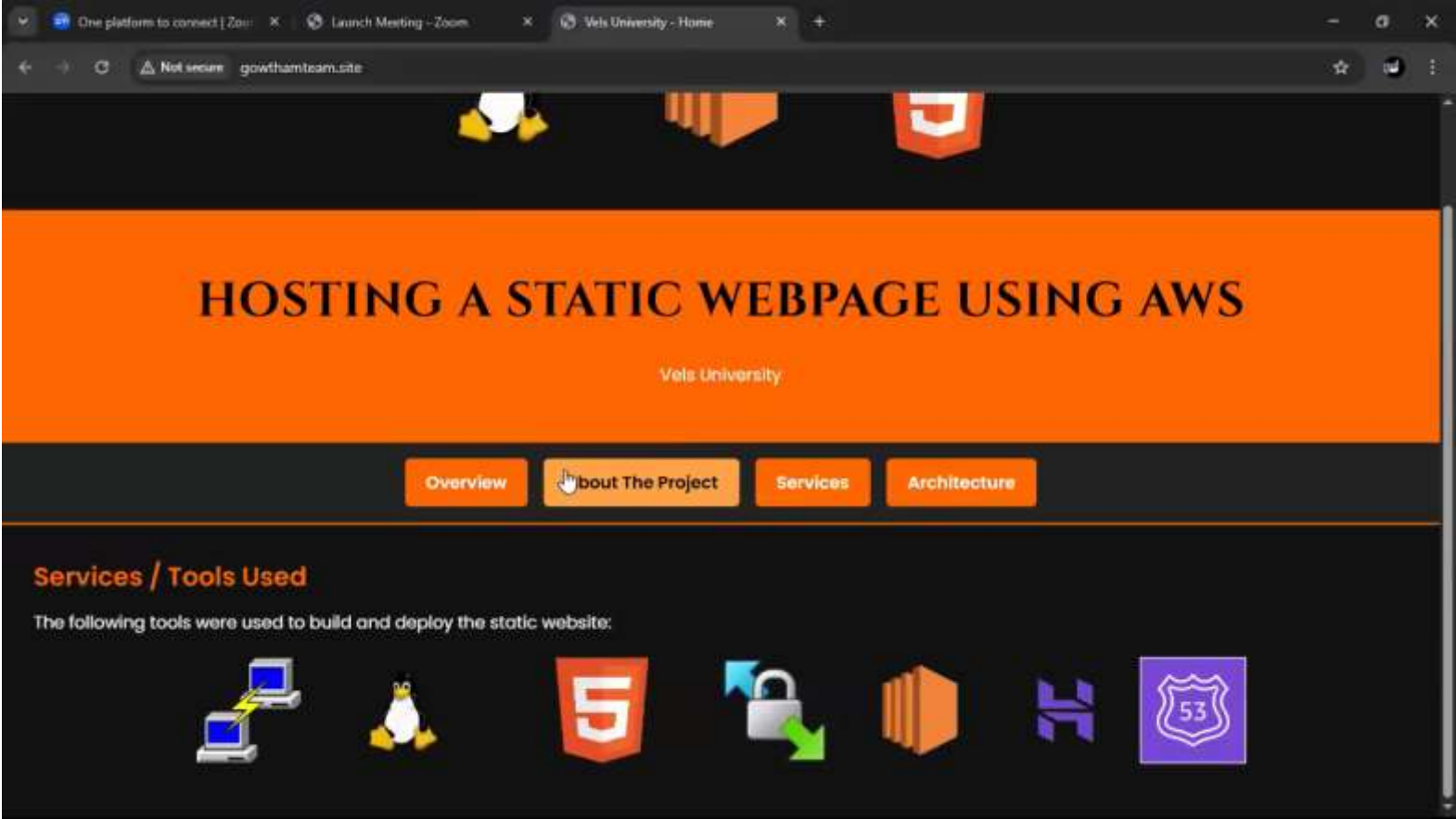
Routing policy: Simple

© 2025, Amazon Web Services, Inc. or its affiliates. [Privacy](#) [Terms](#) [Cookie preferences](#)



OUTPUT :





One platform to connect | Zoom x Launch Meeting - Zoom x Vels University - Home x +

Not secure: gowthamteam.site


HOSTING A STATIC WEBSITE USING AWS

Vels University

Overview About The Project **Services** Architecture

Architecture

The architecture includes using Amazon EC2 with Linux OS, Apache for web hosting, domain purchase via Hostinger, and domain routing using Route 53 with proper routing policies to ensure minimal downtime.



```
graph LR; AWS[AWS Cloud] --> EC2[EC2]; EC2 --> Apache[APACHE SERVER]; Apache -- WnSCP --> Security[Security Lock]; Security --> Web[WEB HOSTING];
```

The diagram illustrates the architecture for hosting a static website on AWS. It shows an Amazon EC2 instance connected to an Apache Server. The Apache Server is connected to a security lock icon labeled 'WnSCP'. The security lock is connected to a 'WEB HOSTING' box. The entire setup is managed by the AWS Cloud.

Windows taskbar: Search, 30°C Mostly clear, 1:16 PM



THANK YOU