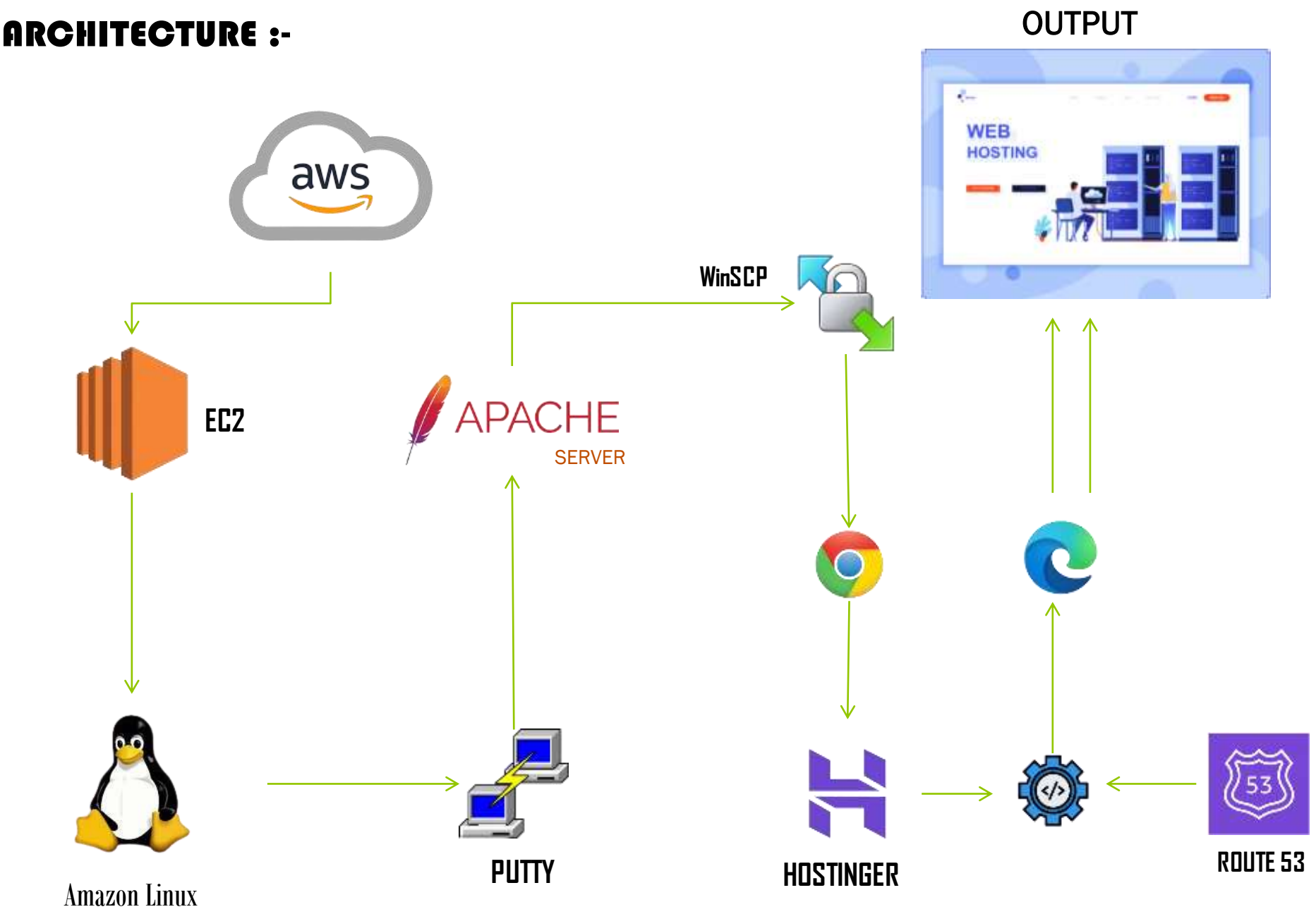
HOSTING A STATIC WEBSITE USING AWS

ARCHITECTURE :-



EXPLANATION :

Deploy a static webpage using AWS, by launching an EC2 instance with the Amazon Linux 2 operating system. EC2 allows us to remotely run and manage servers. After launching the instance, we install the Apache HTTP Server, which is open-source software widely used to host web content. Apache serves our static website files (HTML, CSS, etc.) to users via HTTP. To transfer website assets from a Windows machine to the Linux server, we use WinSCP, a tool that enables secure file transfer using the EC2 instance's public IP and private key. Once the website files are in place, we can access the site through the EC2's public IP. To link a custom domain, we purchase one through Hostinger and configure it using Amazon Route 53. Route 53 handles DNS and maps the domain to the EC2 instance, making the site accessible by name instead of IP. We update the Hostinger domain's nameservers to point to Route 53. Finally, we can add routing policies in Route 53 to reduce server downtime and improve performance.

TECHNOLOGY USED :

Amazon Web Service

HOSTINGER

HTML

EC2

Amazon Linux

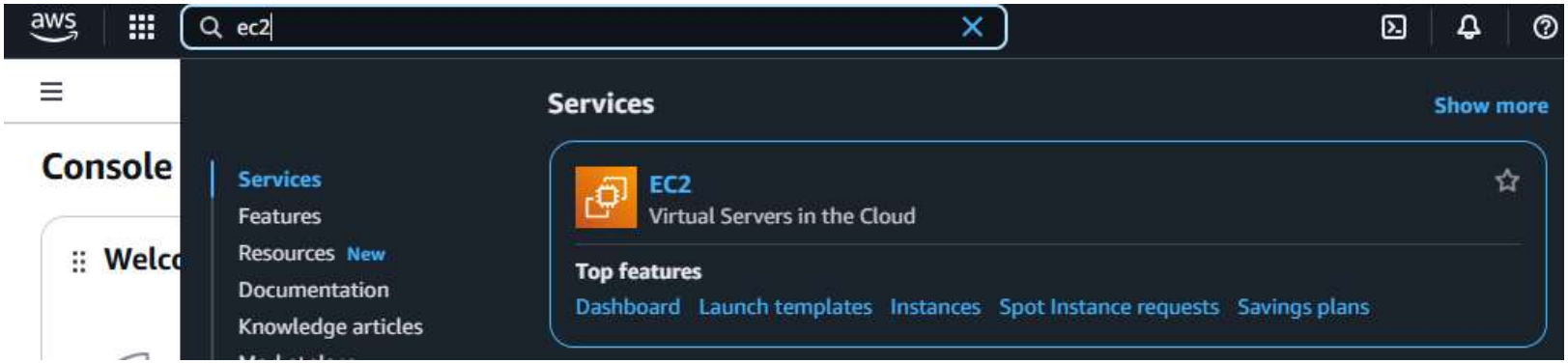
WinSCP

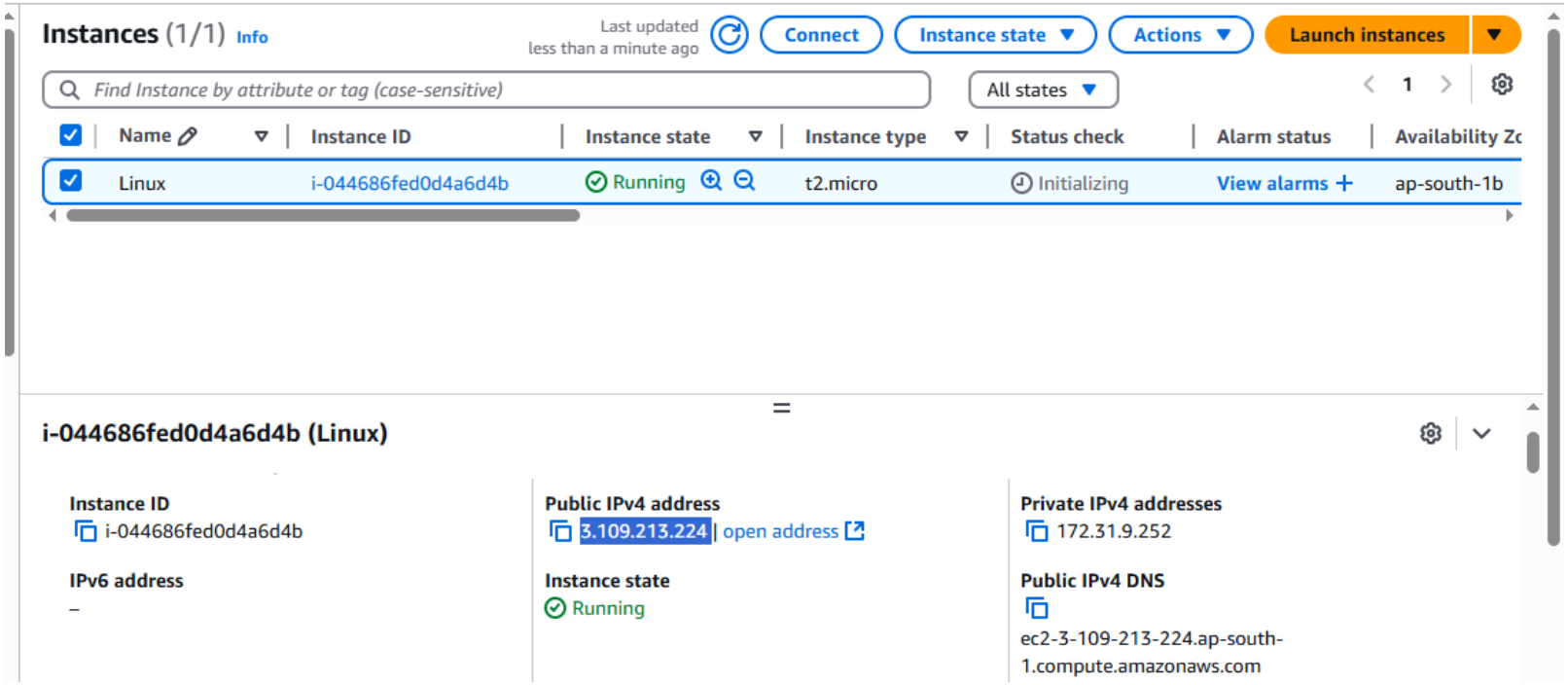
Route 53

PUTTY

APACHE SERVER

WORKING
SAMPLE :





PuTTY Configuration

Category:

- Session
  - Logging
- Terminal
  - Keyboard
  - Bell
  - Features
- Window
  - Appearance
  - Behaviour
  - Translation
  - Selection
  - Colours
- Connection
  - Data
  - Proxy
  - SSH
  - Serial
  - Telnet
  - Rlogin
  - SUPDUP

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: Telnet

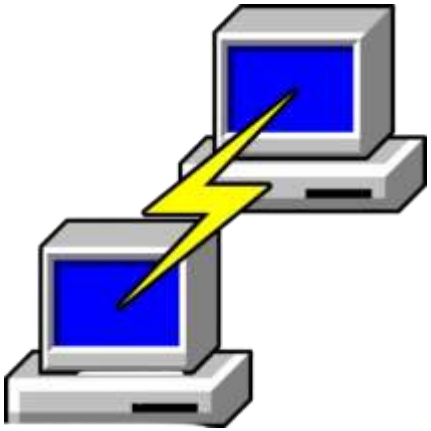
Load, save or delete a stored session

Saved Sessions

Default Settings

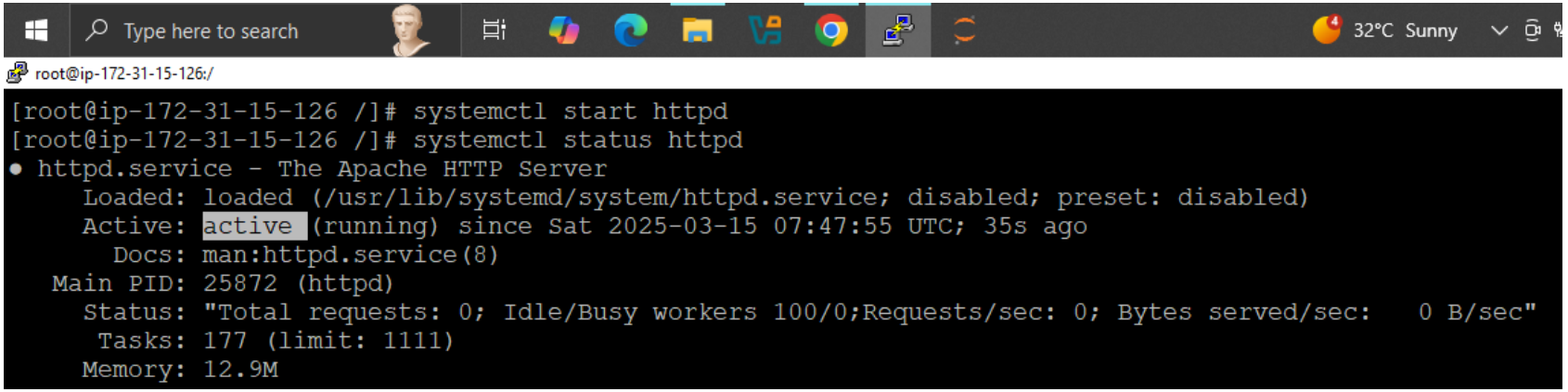
Load | Save | Delete

About | He

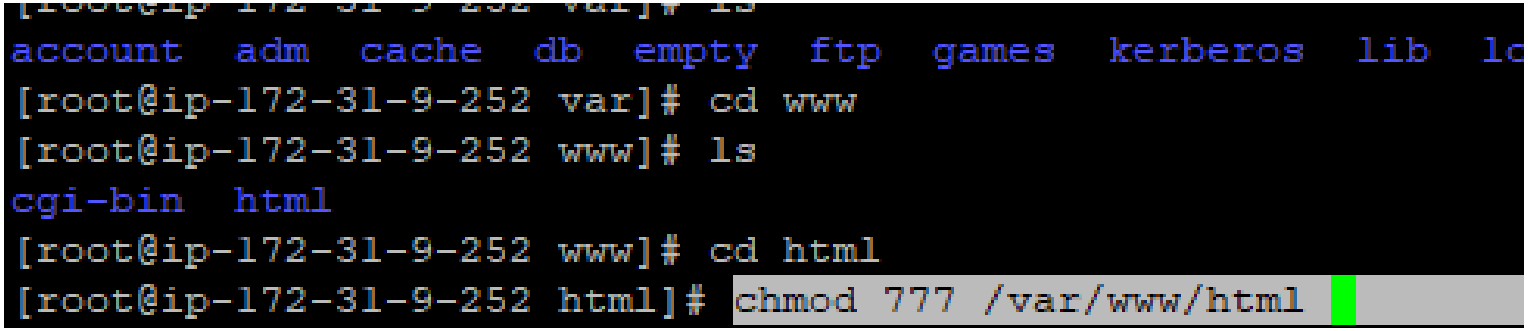


```
login as: ec2-user
Authenticating with public key "NEWKEY"
   ,     #_
   ~\_  ####_        Amazon Linux 2023
  ~~  \_#####\
  ~~     \###|
  ~~       \#/ ___   https://aws.amazon.com/linux/amazon-linux-2023
   ~~       V~' '->
    ~~~         /
      ~~._.   _/
         _/ _/
       _/m/'
[ec2-user@ip-172-31-9-252 ~]$ cd /
[ec2-user@ip-172-31-9-252 /]$
```

APACHE INSTALLATION :



FILE PERMISSION :

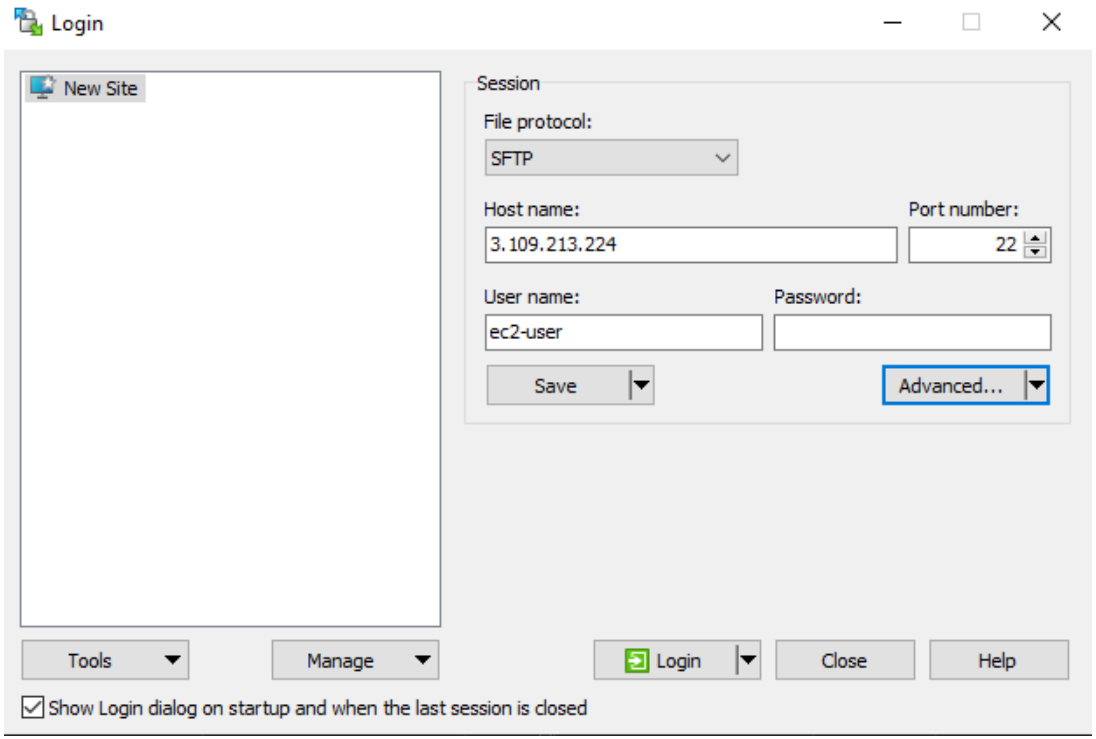


APACHE INSTALLATION

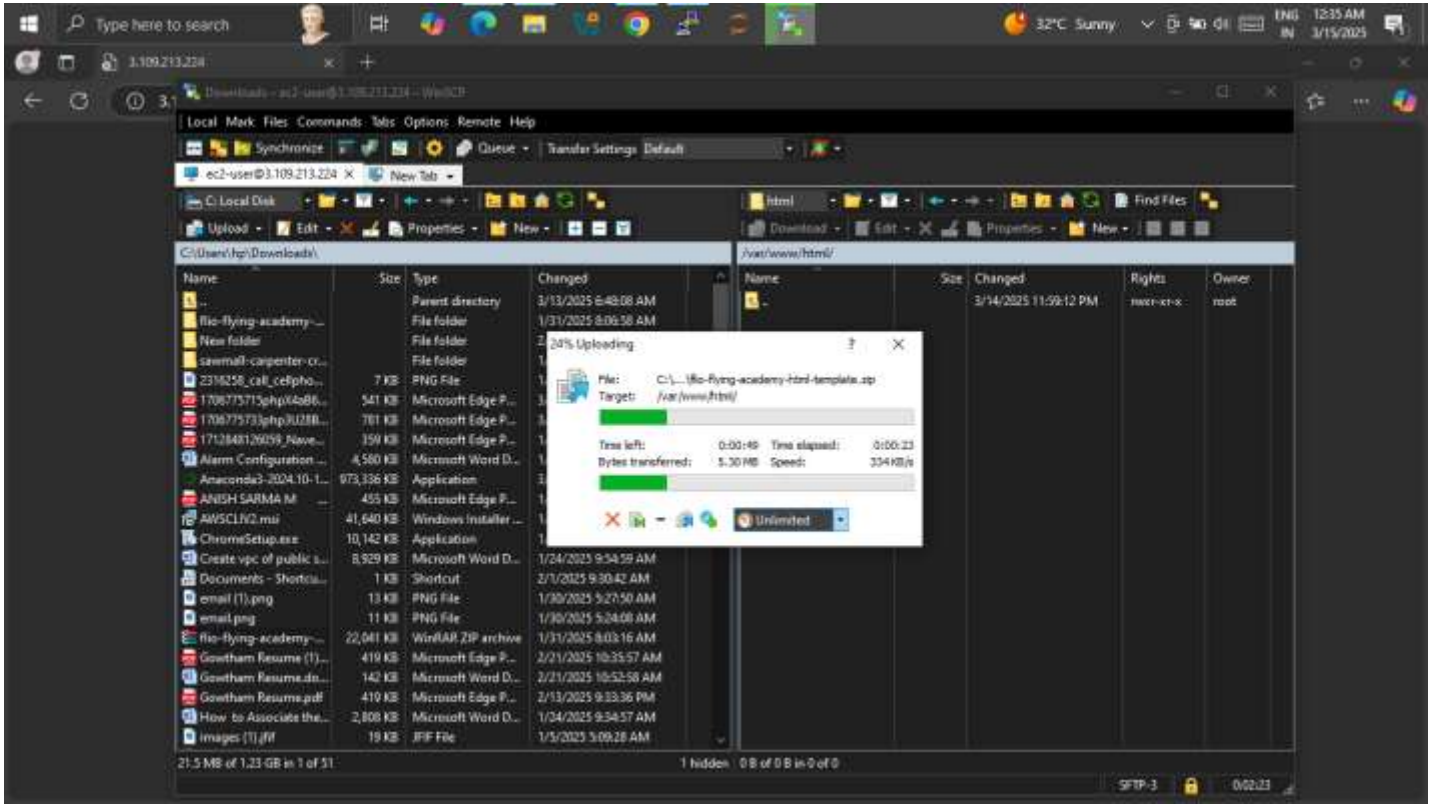
sudo – i →	Changing as Root User
cd / →	Change Directory
Yum install httpd –y →	Installing Apache
systemctl start httpd →	Starting Apache server
systemctl status httpd →	Status check for apache
Chmod 777 /var/html/www →	File Permission for apache directory

CONNECTING WINSCP

- WinScp is a Tool used to Transfer data and files among different OS without any difficulties.



ASSESTS 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;
  }
.
```

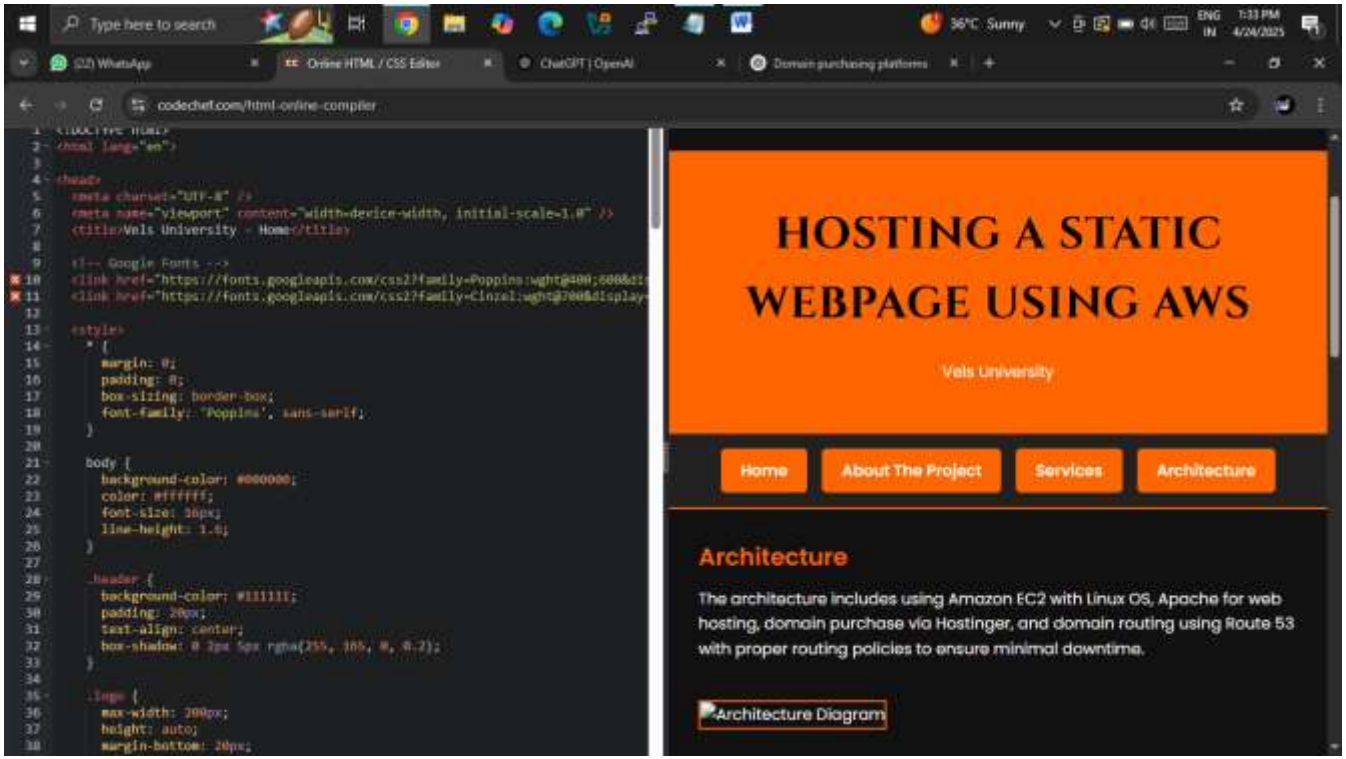
```
.aws-title {
      font-family: 'Cinzel', serif;
      font-weight: 700;
      letter-spacing: 1px;
      font-size: 2.8em;
      text-transform: uppercase;
      margin-bottom: 20px;
      color: #000000;
    }

    .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);
    }
  }
```

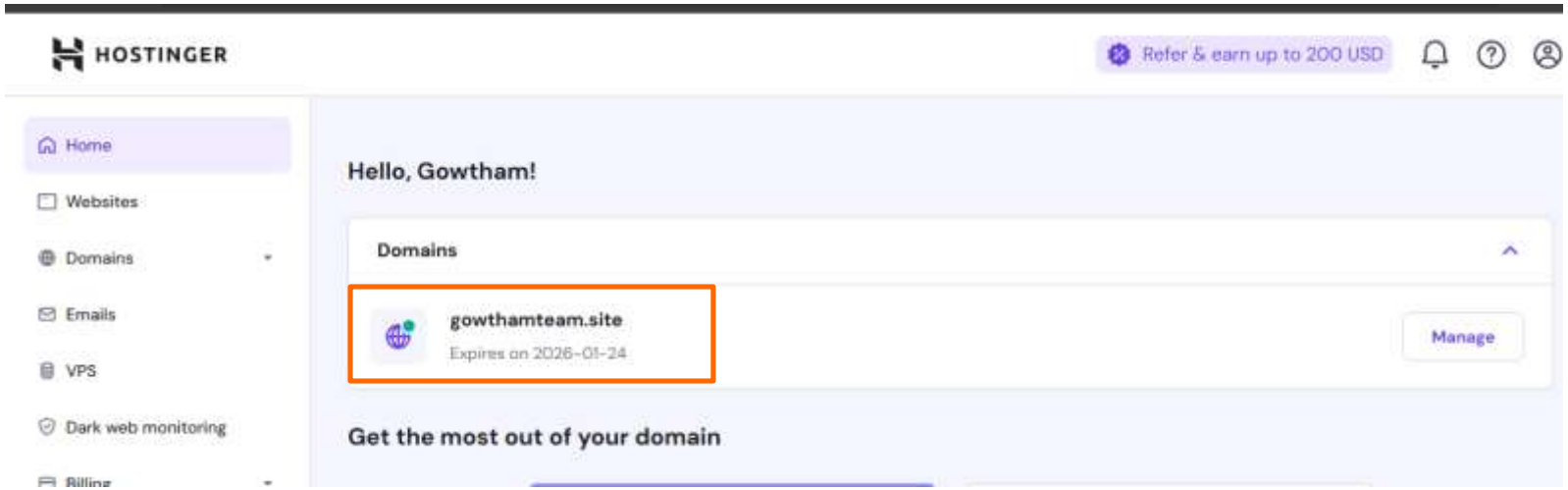
```
pre {
    background-color: #222222;
    padding: 10px;
    border-left: 4px solid #ff6600;
    overflow-x: auto;
  }

  .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 :

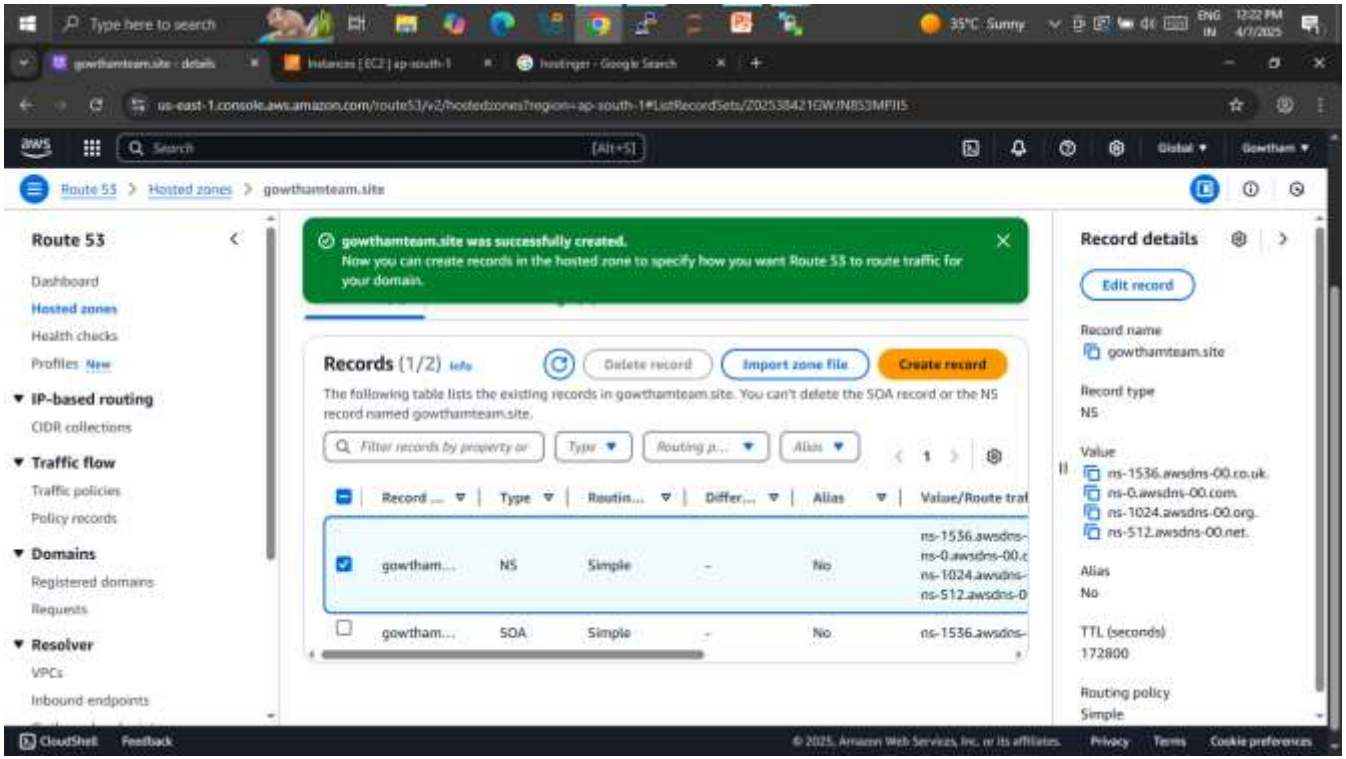

Type here to search
codechef.com/html-online-compiler
HOSTING A STATIC WEBPAGE USING AWS
Vels University
Home
About The Project
Services
Architecture
Architecture
The architecture includes using Amazon EC2 with Linux OS, Apache for web hosting, domain purchase via Hostinger, and domain routing using Route 53 with proper routing policies to ensure minimal downtime.
Architecture Diagram

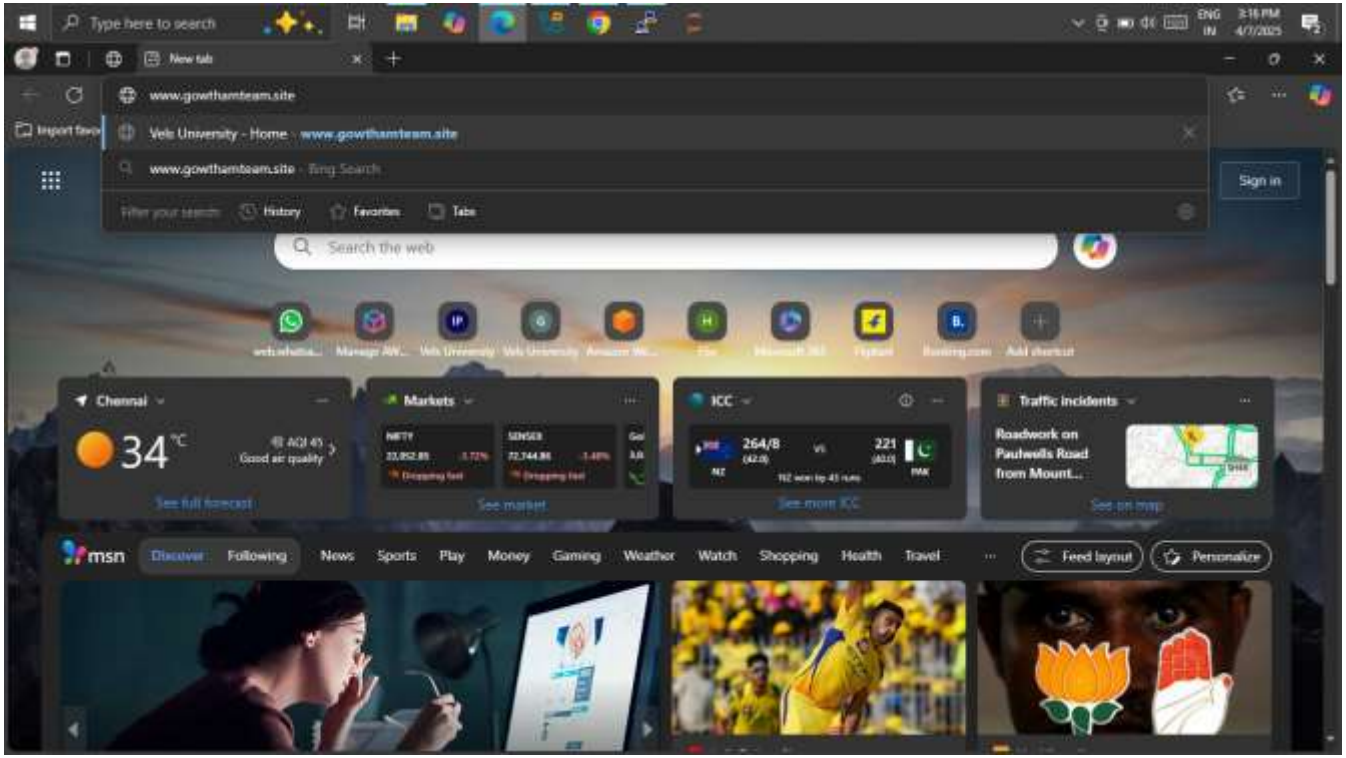
PRIVATE DOMAIN :

Purchasing Private Domain “gowthateam.site” from hostinger

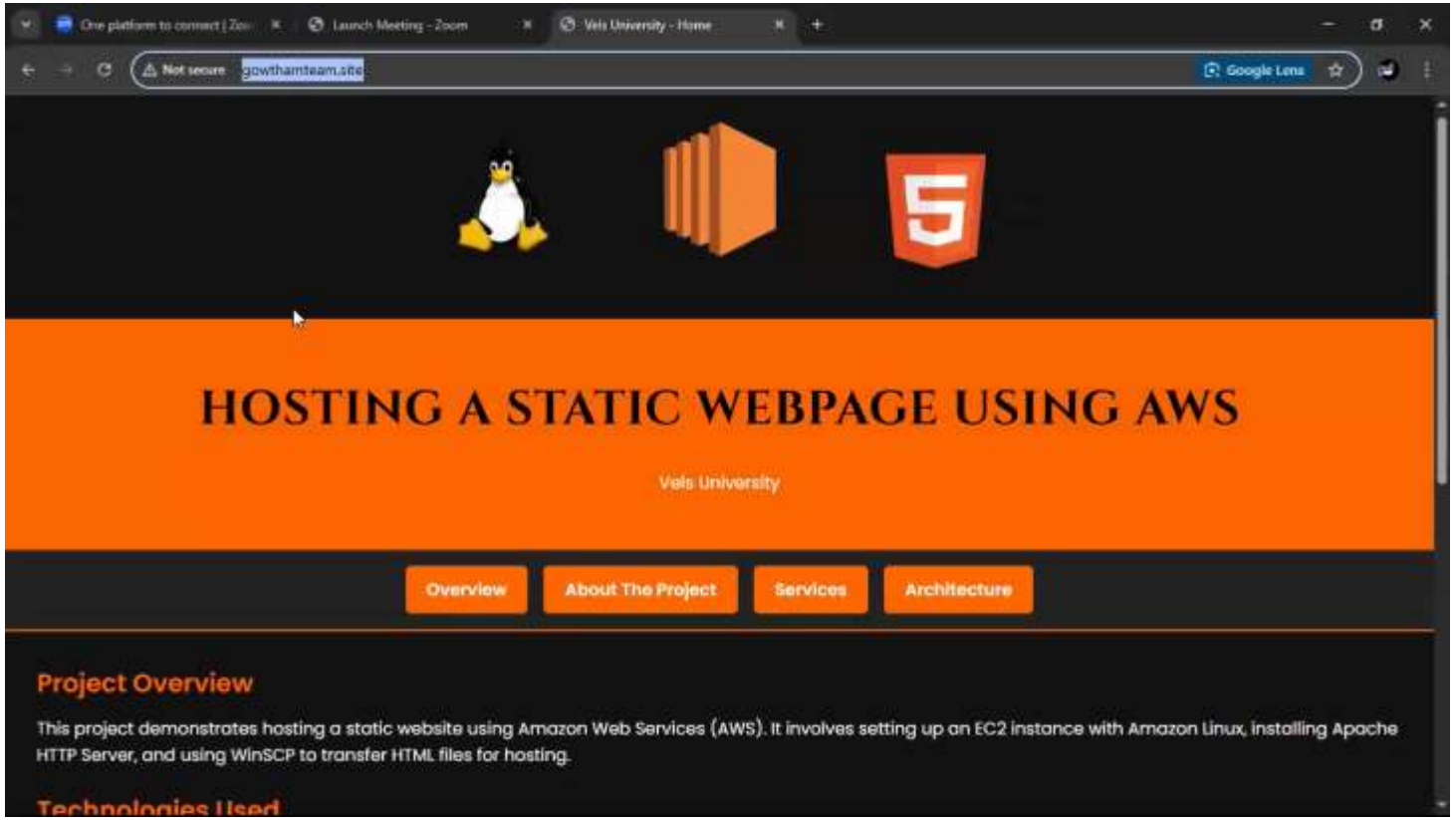


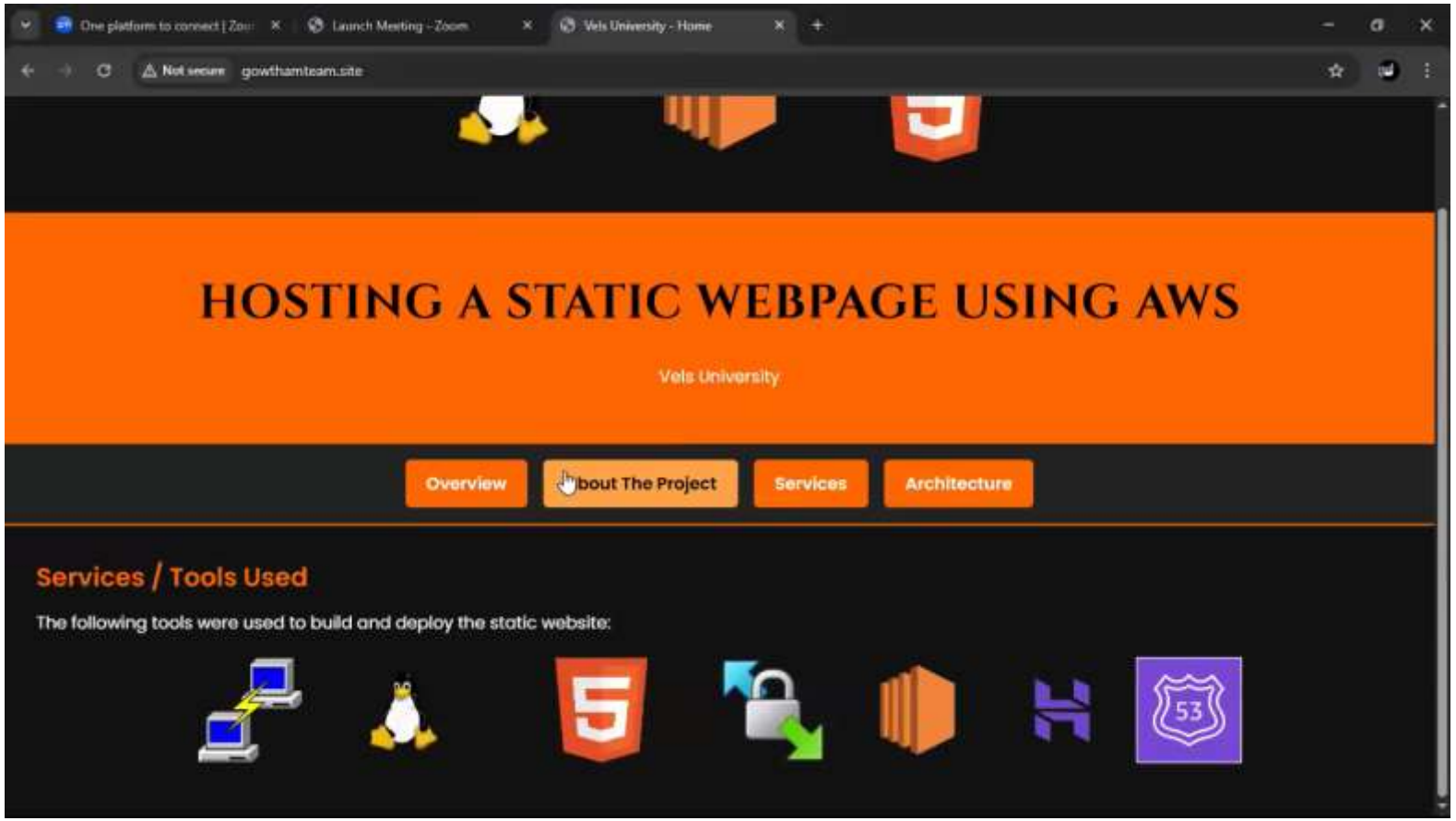
CONFIGURING PRIVATE DOMAIN VIA ROUTE 53

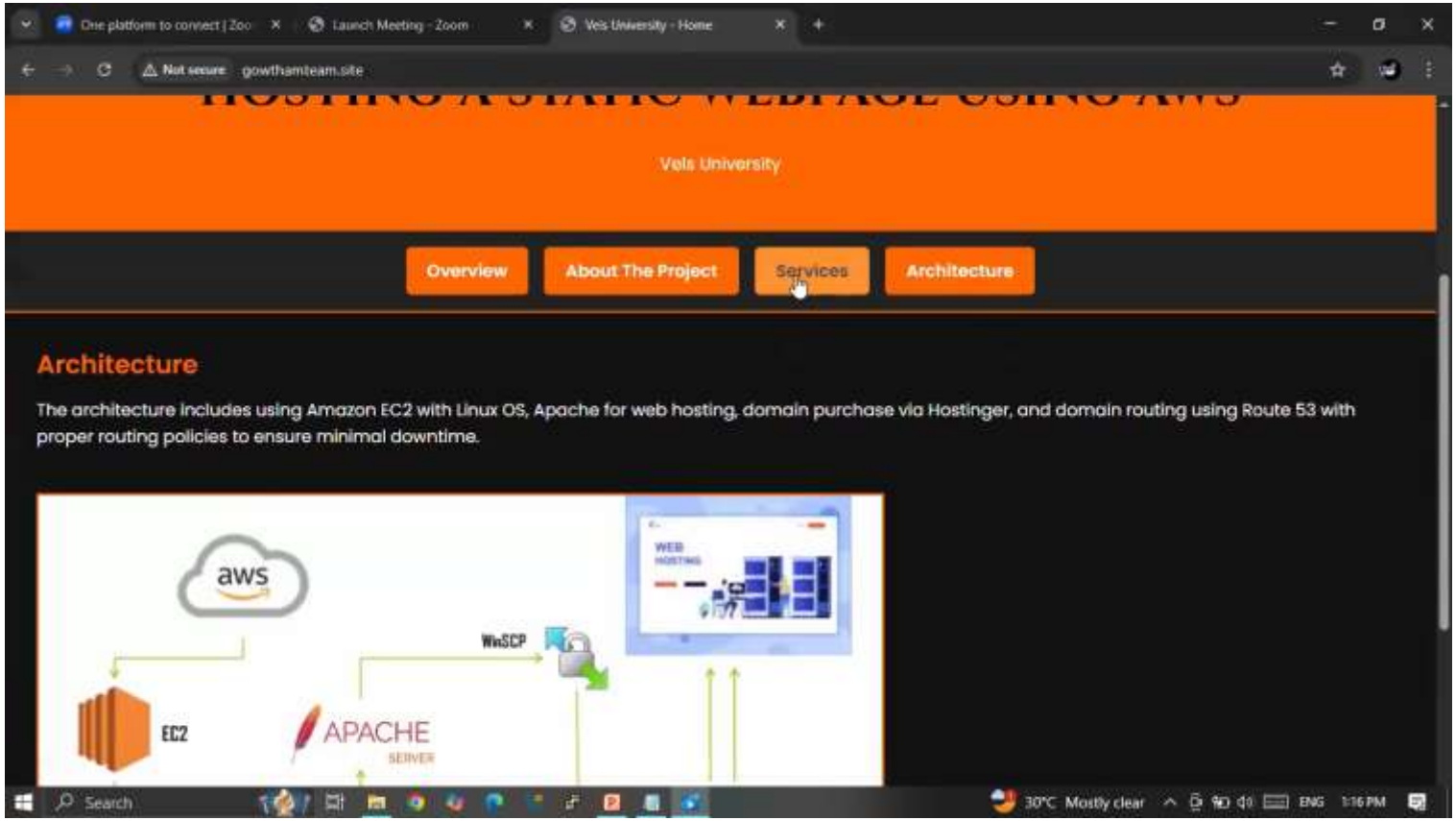



Type here to search
New tab
www.gowthamteam.site
Vels University - Home · www.gowthamteam.site
www.gowthamteam.site - Bing Search
History
Favorites
Tabs
Sign in
Search the web
Chennai
34 °C
AQI 45
Good air quality
See full forecast
Markets
See market
ICC
264/8
221
See more ICC
Traffic incidents
Roadwork on Paulwells Road from Mount...
msn
Discover
Following
News
Sports
Play
Money
Gaming
Weather
Watch
Shopping
Health
Travel
Feed layout
Personalize

OUTPUT :


Not secure
gowthamteam.site
Google Lens
HOSTING A STATIC WEBPAGE USING AWS
Vels University
Overview
About The Project
Services
Architecture
Project Overview
This project demonstrates hosting a static website using Amazon Web Services (AWS). It involves setting up an EC2 instance with Amazon Linux, installing Apache HTTP Server, and using WinSCP to transfer HTML files for hosting.


Launch Meeting - Zoom
Vels University - Home
Not secure
gowthamteam.site
HOSTING A STATIC WEBPAGE USING AWS
Vels University
Overview
bout The Project
Services
Architecture
Services / Tools Used
The following tools were used to build and deploy the static website:
53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aws
WinSCP
EC2
APACHE
SERVER
WEB HOSTING
Search
30°C Mostly clear
ENG
1:16 PM

THANK YOU