D Y PATIL INTERNATIONAL UNIVERSITY
AKURDI PUNE

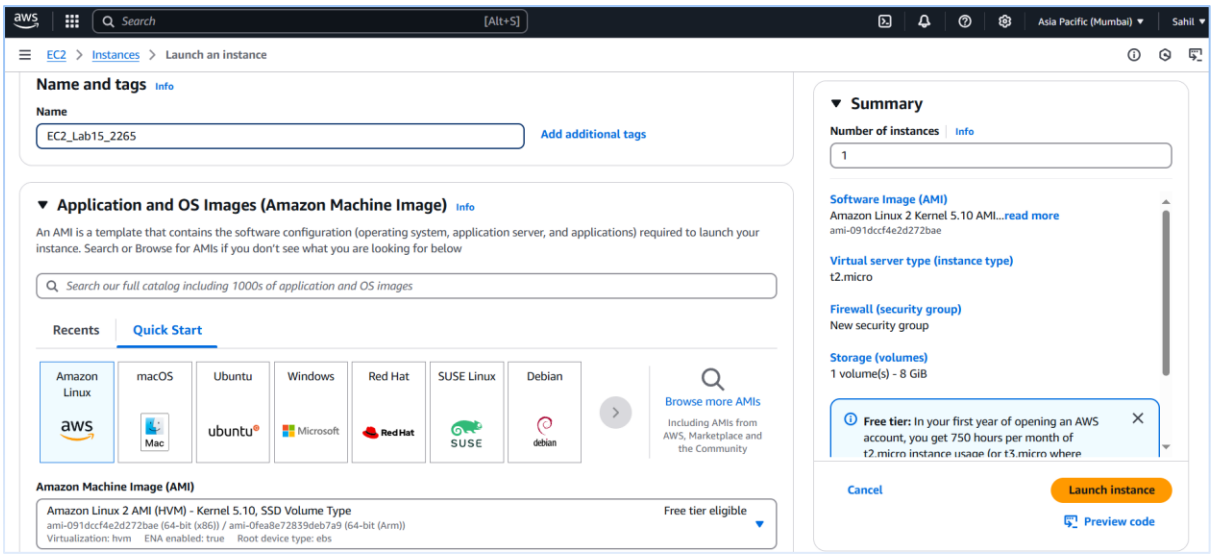
School of Computer Science, Engineering and Applications (SCSEA)
B. Tech TY (CCSA)
Subject: Cloud Architecture And Protocol

Name of the Student: Sahil S. Mandawgade **PRN: 20220802265**

Title of Practical: 15. Static Website Hosting on EC2 with Persistent Access via Elastic IP.

Step 1: Launch an EC2 Instance with User Data.

- Open AWS Console.
- Go to EC2 – Click on 'Launch instance'.
- Name the instance as 'EC2_Lab15_2265'.
- Choose **Amazon Linux 2 AMI** (Free Tier eligible).
- Choose **t2.micro**.
- Select **Key Pair**.
- Add a **Security Group** with following rules:
  - **SSH** (Port 22) from Anywhere.
  - **HTTP** (Port 80) from Anywhere.
  - **HTTPS** (Port 443) from Anywhere.



- Under **Advanced Details**, paste the following in **User Data**:

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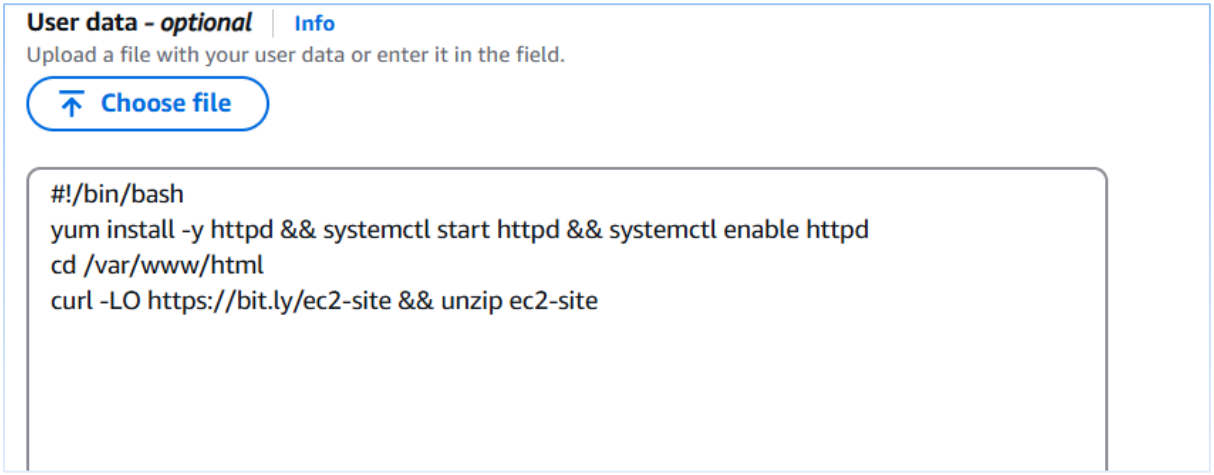
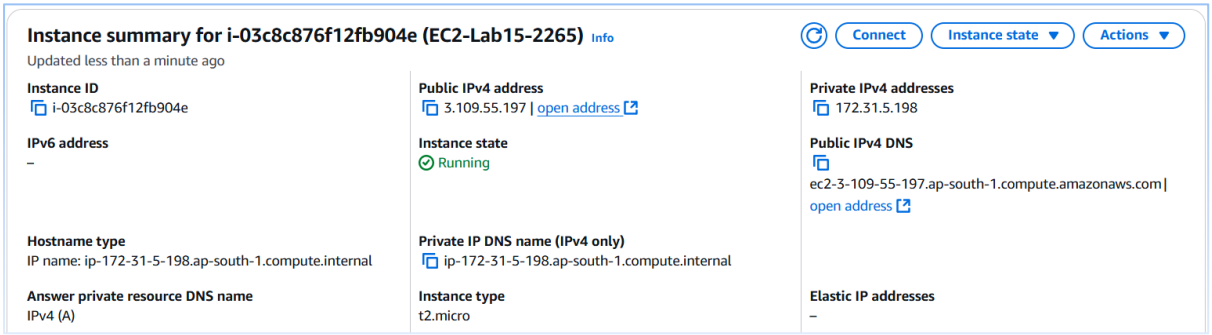


- Launch the instance.

Step 2: Verify Static Website.

- Once running, copy the **Public IPv4 address** of the instance.



- Paste the **Public IPv4 address** in a new tab.
- You should see:
  Apache Server is Running – Hosted from EC2
- The IP address here is : **'3.109.55.197'**

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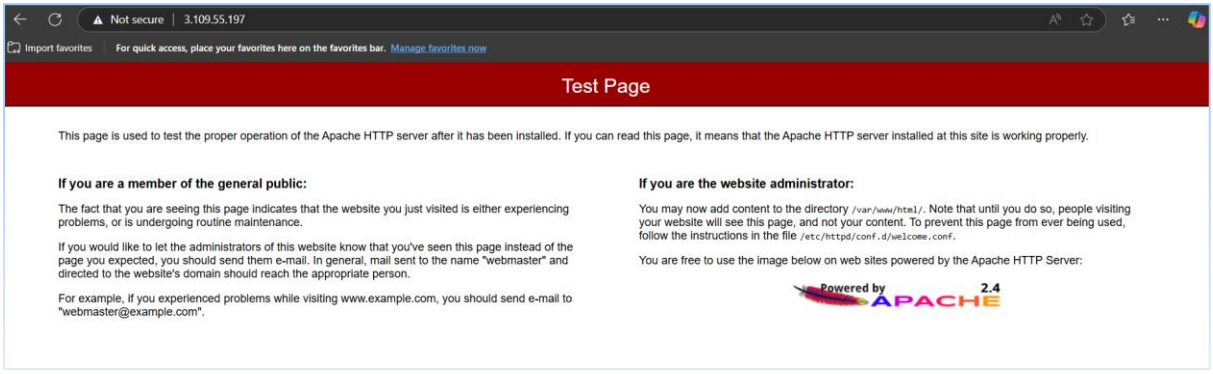
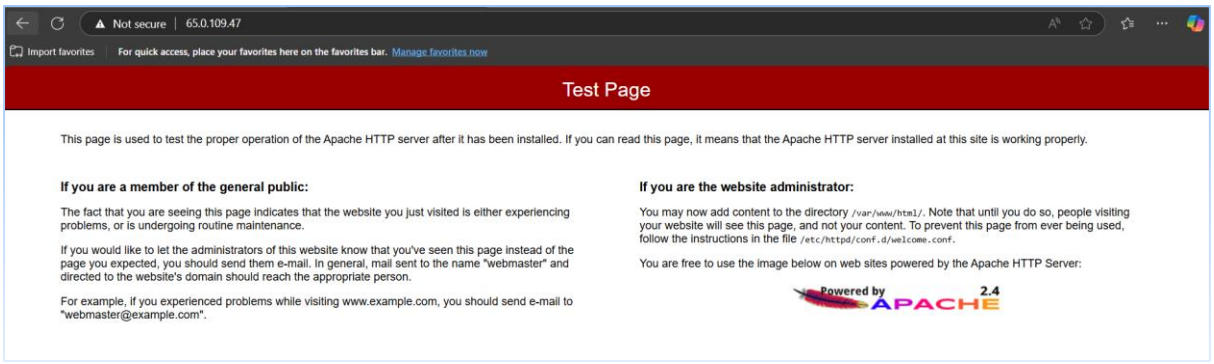


Step 3: Stop and Start Instance to Observe IP Change

- Stop the instance.
- Start it again.
- Access the new IP in browser – the page should still work, but the IP is different.
- The new IP address is : **'65.0.109.47'**.



Step 4: Allocate and Associate Elastic IP.

- Go to **Elastic IPs – Allocate Elastic IP address**.

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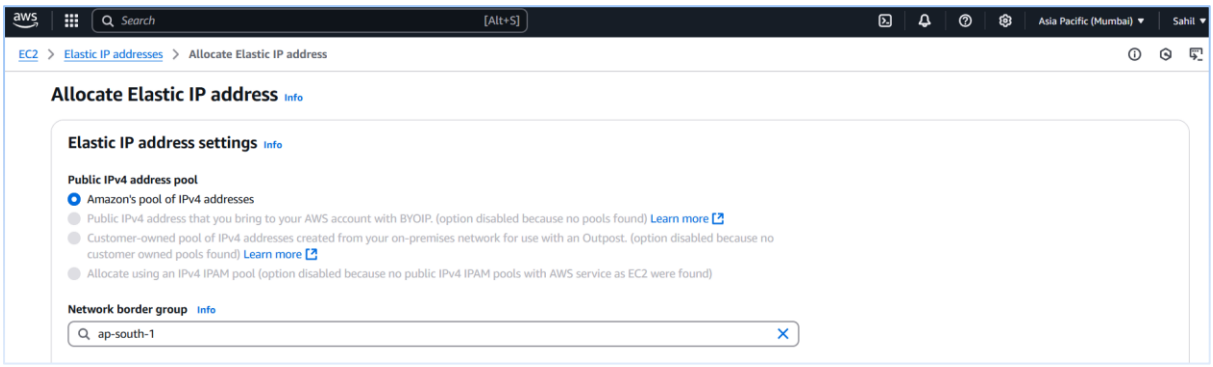
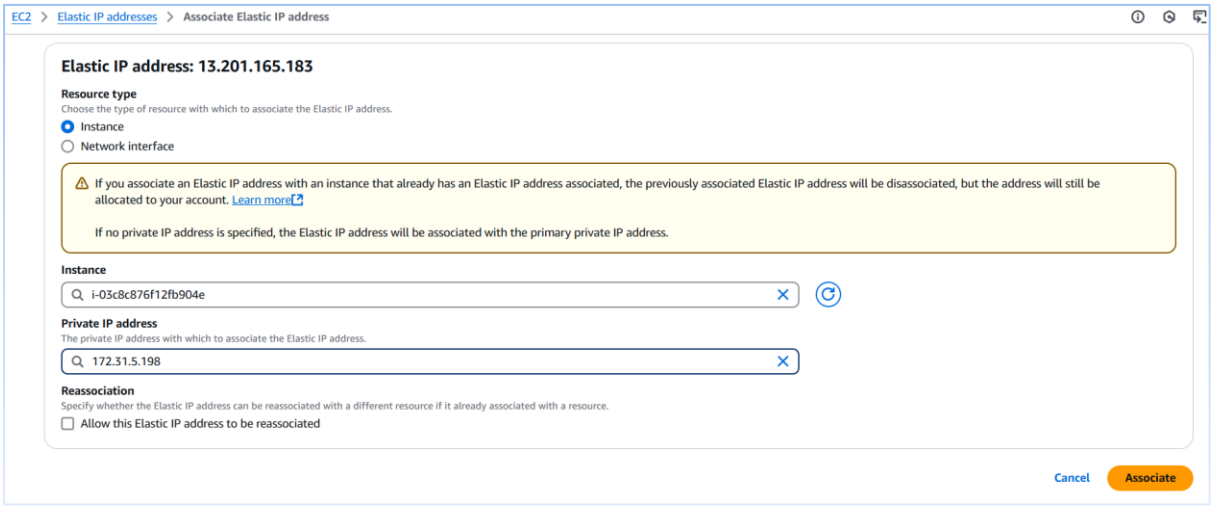


- Click on **Associate Elastic IP** with the instance.
  - Select the instance we created.
  - Select the Private IP address.



- Open a new tab in the browser and paste the newly allocated IP address: **'13.201.165.183'**.

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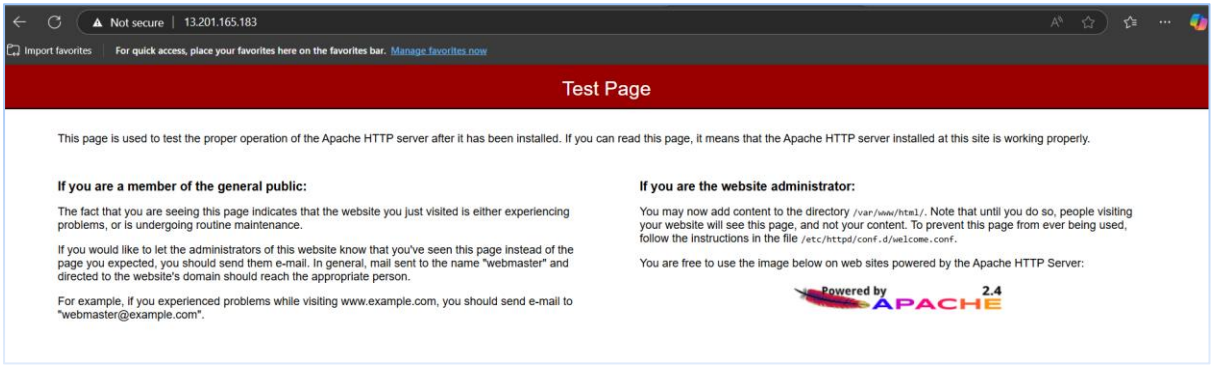

Step 5: Stop/Start the EC2 Instance again to verify Elastic IP persistence.

- Stop and start the instance again.
- Visit the **Elastic IP** in browser.
- The website should still load – IP remains unchanged.
- IP address is : **'13.201.165.183'**.