

# AWS EC2 Apache Web Server Project

## Project Overview

In this hands-on project, I successfully launched an Amazon EC2 instance, connected securely via SSH, installed the Apache HTTP server, and deployed a custom HTML web page live to the internet. This project reflects my skills in cloud infrastructure, Linux system administration, and web server management.

## EC2 Instance Running

The screenshot displays the AWS Management Console interface for an EC2 instance. The browser address bar shows the URL: `us-east-2.console.aws.amazon.com/ec2/home?region=us-east-2#InstanceDetails:instanceId=i-08b42cf29d97b0976`. The console header includes the AWS logo, a search bar, and navigation links for EC2, Instances, and the specific instance ID `i-08b42cf29d97b0976`.

The main content area is titled "Instance summary for i-08b42cf29d97b0976 (oladapo-web-server)". It features a "Connect" button, an "Instance state" dropdown menu, and an "Actions" dropdown menu. The instance was updated 1 minute ago.

The instance details are organized into three columns:

- Left Column:**
  - Instance ID:** i-08b42cf29d97b0976
  - IPv6 address:** -
  - Hostname type:** IP name: ip-172-31-13-163.us-east-2.compute.internal
  - Answer private resource DNS name:** IPv4 (A)
  - Auto-assigned IP address:** 18.227.114.52 [Public IP]
  - IAM Role:** -
- Middle Column:**
  - Public IPv4 address:** 18.227.114.52 | [open address](#)
  - Instance state:** Running
  - Private IP DNS name (IPv4 only):** ip-172-31-13-163.us-east-2.compute.internal
  - Instance type:** t2.micro
  - VPC ID:** vpc-06f3706563445010d
  - Subnet ID:** -
- Right Column:**
  - Private IPv4 addresses:** 172.31.13.163
  - Public IPv4 DNS:** ec2-18-227-114-52.us-east-2.compute.amazonaws.com | [open address](#)
  - Elastic IP addresses:** -
  - AWS Compute Optimizer finding:** Opt-in to AWS Compute Optimizer for recommendations. | [Learn more](#)
  - Auto Scaling Group name:** -

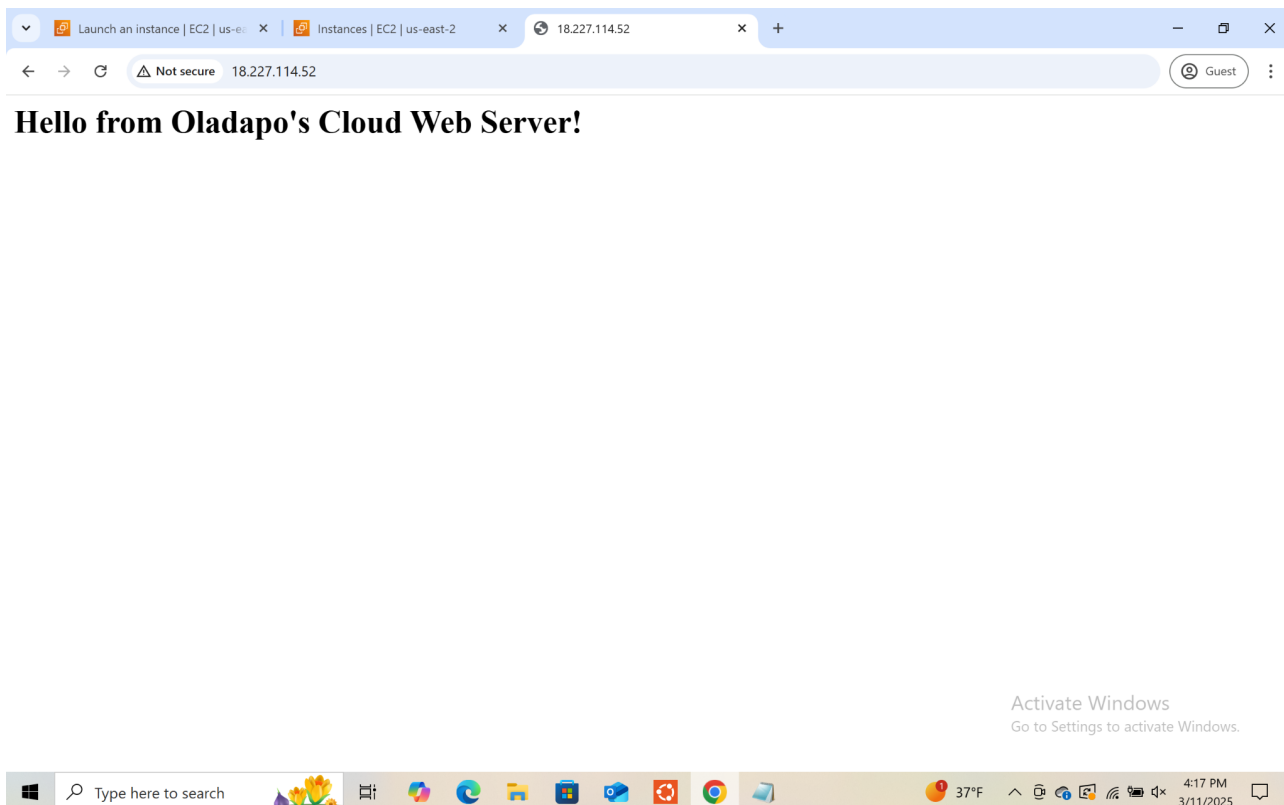
The bottom of the console shows a footer with "CloudShell", "Feedback", and copyright information: "© 2025, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences". The Windows taskbar at the very bottom shows the search bar, task view, and various application icons, along with the system clock indicating 12:52 PM on 3/11/2025.

## SSH Connection to Instance

# AWS EC2 Apache Web Server Project

[illegible]

## Web Server Running



## Step 1: Launch EC2 Instance

- Region: us-east-2 (Ohio)

# AWS EC2 Apache Web Server Project

- AMI: Amazon Linux 2023
- Instance type: t2.micro
- Created key pair: oladapo-key.pem
- Security Group: Allowed SSH (22) and HTTP (80)

## Step 2: SSH Issues and Fixes

Problem 1: Permission Denied (publickey)

Solution:

```
chmod 400 oladapo-key.pem
```

Problem 2: PEM file not found in ~/Downloads

Solution:

```
cd /mnt/c/Users/YourUsername/Downloads
```

```
cp oladapo-key.pem ~/
```

```
chmod 400 ~/oladapo-key.pem
```

## Step 3: Connect to EC2 Instance

```
ssh -i ~/oladapo-key.pem ec2-user@18.227.114.52
```

## Step 4: Update the System

```
sudo yum update -y
```

## Step 5: Install Apache Web Server

```
sudo yum install httpd -y
```

## Step 6: Start and Enable Apache

```
sudo systemctl start httpd
```

```
sudo systemctl enable httpd
```

# AWS EC2 Apache Web Server Project

## Step 7: Deploy Custom Web Page

```
cd /var/www/html
```

```
sudo nano index.html
```

```
<h1>Hello from Oladapo's Cloud Web Server!</h1>
```

## Step 8: View Live Web Page

Open: <http://18.227.114.52>

## Skills Demonstrated

Skills Demonstrated:

- AWS EC2 provisioning and SSH configuration
- Linux terminal and permissions management
- Apache Web Server installation and management
- Troubleshooting SSH errors
- HTML deployment and hosting
- Network Security Group configuration

## About Me

Author:

Oladapo Adenekan

Cloud & DevOps Enthusiast

Ohio, USA

LinkedIn: [www.linkedin.com/in/oladapo568](https://www.linkedin.com/in/oladapo568)