

# HOST DYNAMIC WEBSITE IN EC2

## Step 1: Set Up an EC2 Instance

### 1. Log in to AWS Management Console:

- Navigate to the [EC2 Dashboard](#).

### 2. Launch a New EC2 Instance:

- Click on "Launch Instance."
- Choose an Amazon Machine Image (AMI). For simplicity, select the latest Amazon Linux 2 AMI (Free Tier eligible).
- Choose an instance type (e.g., **t2.micro** for Free Tier).
- Click "Next" and configure instance details as needed (default options are fine for a basic setup).
- Click "Next" until you reach the "Configure Security Group" page.

### 3. Configure Security Group:

- Add the following rules to allow SSH and HTTP/HTTPS access:
  - SSH: Port 22, Source: My IP or anywhere (0.0.0.0/0)
  - HTTP: Port 80, Source: Anywhere (0.0.0.0/0)
  - HTTPS: Port 443, Source: Anywhere (0.0.0.0/0)
- Click "Review and Launch."

#### **4. Launch the Instance:**

- Review the instance details, then click "Launch."
- Select an existing key pair or create a new one (you'll need this key to SSH into your instance).
- Click "Launch Instances."

#### **5. Connect to Your EC2 Instance:**

- Once your instance is running, click "View Instances."
- Select your instance, click "Connect," and follow the instructions to SSH into your EC2 instance.

### **Step 2: Install Apache package**

1. `sudo apt-get install apache2 -y`
2. `cd /var/www/html/`
3. `sudo systemctl enable httpd`

### **Step 7: Test Your Application**

#### **1. Access Your Application:**

- Open your web browser and navigate to your EC2 instance's public IP or domain name.

#### **2. Verify Your Application is Running:**

- You should see your application running successfully.

## **Optional: Set Up a Domain and SSL**

- **Register a Domain: Use AWS Route 53 or any domain registrar to register a domain name.**
- **Point Domain to EC2 Instance: Update DNS records to point your domain to the public IP of your EC2 instance.**
- **Set Up SSL with Let's Encrypt: Use Certbot to set up SSL certificates for your domain.**