Project Information

- Project Name: Mindfulness Timer
- Developed By: LeoAxis Team
- Purpose: A web application to track mindfulness, study, or work sessions using customizable timers.
- Tech Stack: HTML, CSS, JavaScript
- Hosted On: AWS EC2 with Apache HTTP Server

LeoAxis Mindfulness Timer Deployment Guide

This beginner-friendly guide walks you through hosting the **LeoAxis Mindfulness Timer**, a static website built with HTML, CSS, and JavaScript, on an Amazon EC2 instance using the Apache HTTP Server.

Prerequisites

Before you begin, ensure you have the following:

- AWS Account: Sign up at aws.amazon.com.
- EC2 Instance: Launch an Amazon Linux 2 instance (t2.micro is free-tier eligible).
- Key Pair (.pem file): Download the key pair when launching your EC2 instance.
- Security Group: Configure with HTTP (port 80) access enabled.

I Step-by-Step Setup

Step 1: Connect to Your EC2 Instance

- 1. Open a terminal (use Command Prompt or PowerShell on Windows, or Terminal on macOS/Linux).
- 2. Navigate to the directory containing your .pem file.
- 3. Run the following command to connect to your EC2 instance (replace your-key.pem and <your-ec2-public-ip> with your key file name and instance public IP):

ssh -i your-key.pem ec2-user@<your-ec2-public-ip>

- 4. Type yes if prompted to confirm the connection.
- Step 2: Install Apache and Git
 - 1. Update the system packages:

sudo yum update -y

2. Install Apache (httpd) and Git:

sudo yum install -y httpd git

Step 3: Start and Enable Apache

1. Start the Apache server:

sudo systemctl start httpd

2. Enable Apache to run on boot:

sudo systemctl enable httpd

3. Verify Apache is running by checking its status:

sudo systemctl status httpd

You should see active (running) in the output.

Step 4: Open HTTP Port 80

- 1. Go to the AWS Management Console.
- 2. Navigate to EC2 > Instances > [Your Instance] > Security Groups.
- 3. Select the associated security group and click Edit inbound rules.
- 4. Add a new rule:
 - o Type: HTTP
 - o Protocol: TCP
 - o Port Range: 80
 - Source: Anywhere (0.0.0.0/0)
- 5. Click Save rules.

Step 5: Clone the Mindfulness Timer Project

1. Navigate to your home directory:

cd~

2. Clone the Mindfulness Timer repository from GitHub:

git clone https://github.com/leoaxis01/Mindfulness-Timer.git

- Step 6: Copy Project Files to Apache's Web Directory
 - 1. Copy the contents of the cloned repository to Apache's root directory (/var/www/html):

sudo cp -r Mindfulness-Timer/* /var/www/html/

2. Verify the files are copied by listing the directory contents:

ls /var/www/html

You should see files like index.html, style.css, index.js, and any assets (e.g., images).

Step 7: Set File Permissions

1. Change the ownership of the web directory to the Apache user:

sudo chown -R apache:apache /var/www/html

2. Set appropriate permissions for the files:

sudo chmod -R 755 /var/www/html

Note: These commands ensure Apache can access your files. If you've already set appropriate ownership (apache:apache) and permissions (at least 644 for files and 755 for directories), you can skip this step. Check with ls -l /var/www/html to confirm.

Step 8: Test Your Website

1. Open a web browser and enter your EC2 instance's public IP address:

http://<your-ec2-public-ip>

2. You should see the Mindfulness Timer website loaded and functional.



Project Structure

After copying the files, the /var/www/html directory should contain:

index.html

style.css

index.js

[images or other assets, if applicable]

X Troubleshooting Tips

- Website not loading?
 - o Ensure Apache is running: sudo systematl status httpd.
 - o Verify port 80 is open in the security group.

o Check file permissions in /var/www/html.

• "Permission denied" when connecting via SSH?

o Run chmod 400 your-key.pem to set correct permissions for your key file.

404 errors?

- o Confirm all project files are in /var/www/html.
- o Check for typos in file names (e.g., index.html vs. Index.html).

Congratulations!

You've successfully deployed the **LeoAxis Mindfulness Timer** on AWS EC2!

For questions or feedback, contact the LeoAxis Team.