LAB: Launch Instances with User-Data

You need:

- An active AWS Account with Root Account Access
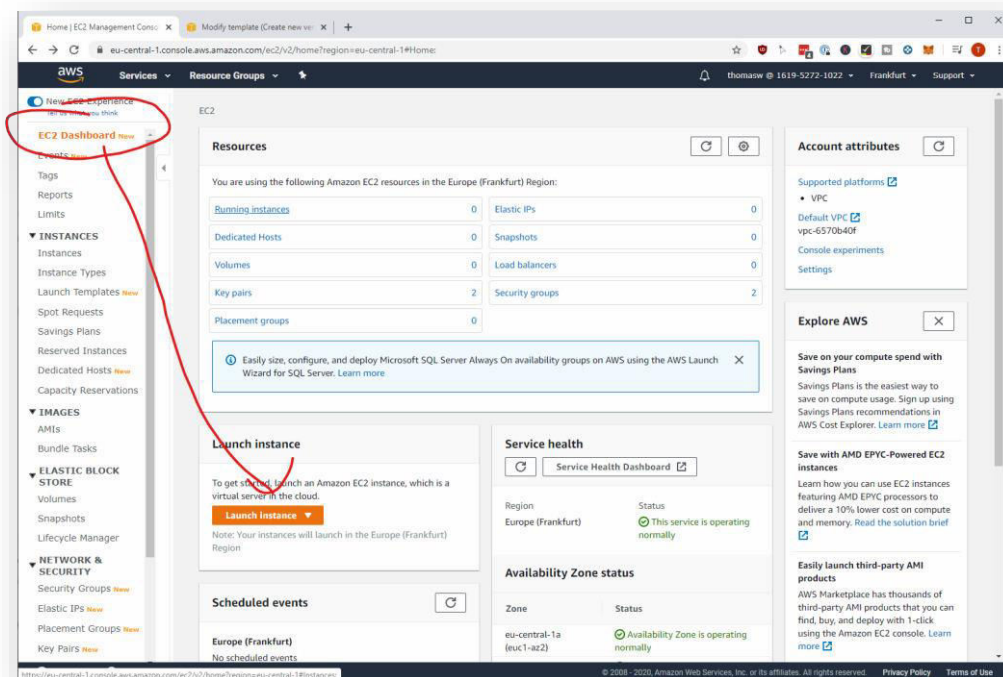
Duration of the Lab: 15 Minutes.
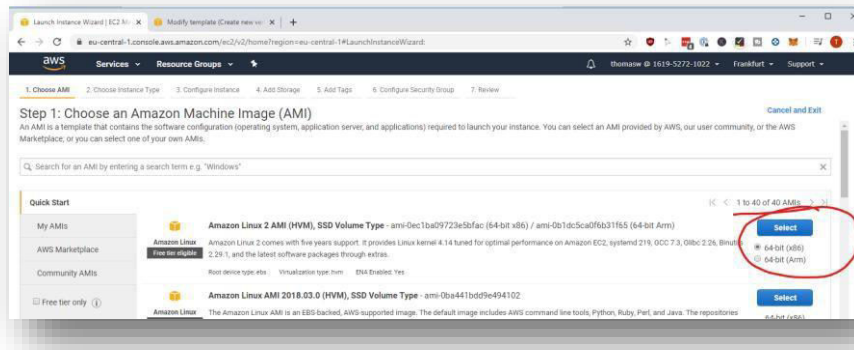
Goal: Understand User-Data

Difficulty: Easy.

Launch with User-Data
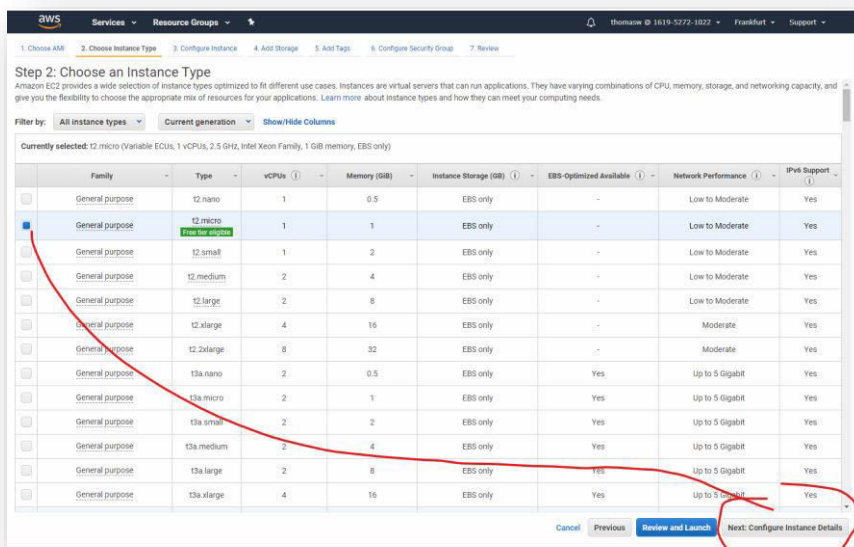
Login into the EC2 Dashboard and Select "Launch Instance".

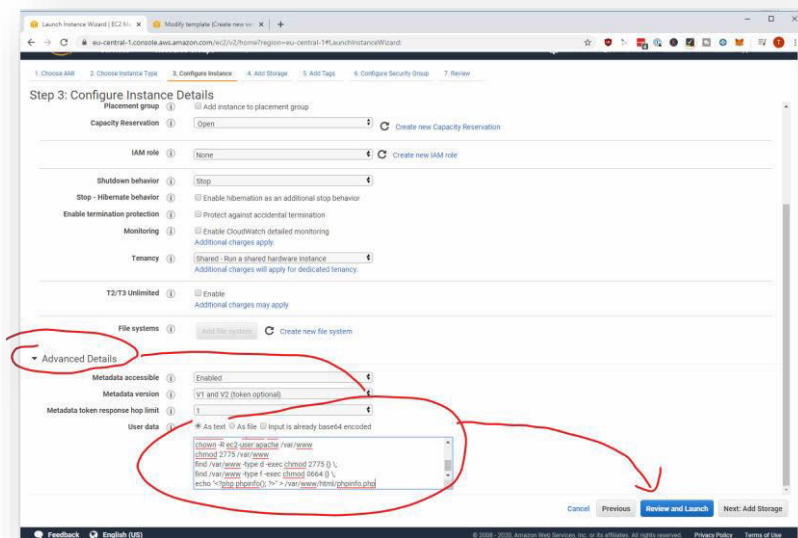Select an AMI, I selected the Amazon Linux 2 AMI:

Then choose an Instance Type, like the t2.micro:

On the next page, scroll down to the Advanced Details. You will find the User data field:

Paste the following script into the user data field and click review and launch.

```
#!/bin/bash
yum update -y
amazon-linux-extras install -y lamp-mariadb10.2-php7.2 php7.2
yum install -y httpd mariadb-server
systemctl start httpd
systemctl enable httpd
usermod -a -G apache ec2-user
chown -R ec2-user:apache /var/www
chmod 2775 /var/www
find /var/www -type d -exec chmod 2775 {} \;
find /var/www -type f -exec chmod 0664 {} \;
echo "<?php phpinfo(); ?>" > /var/www/html/phpinfo.php
```
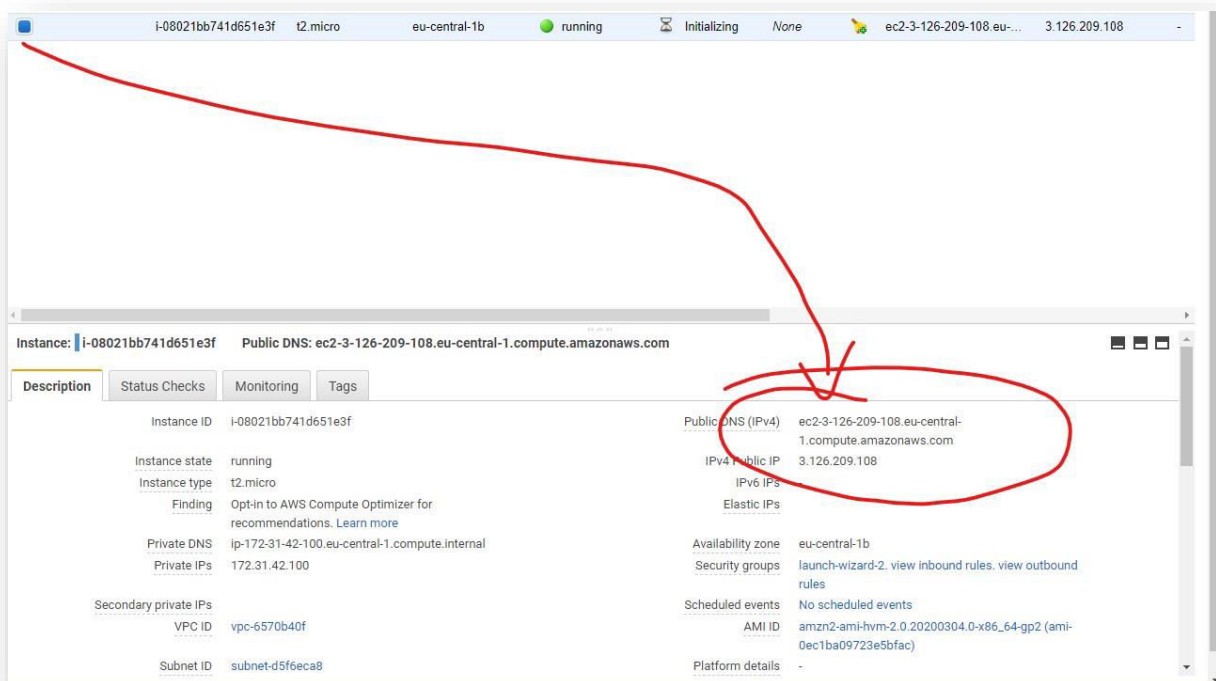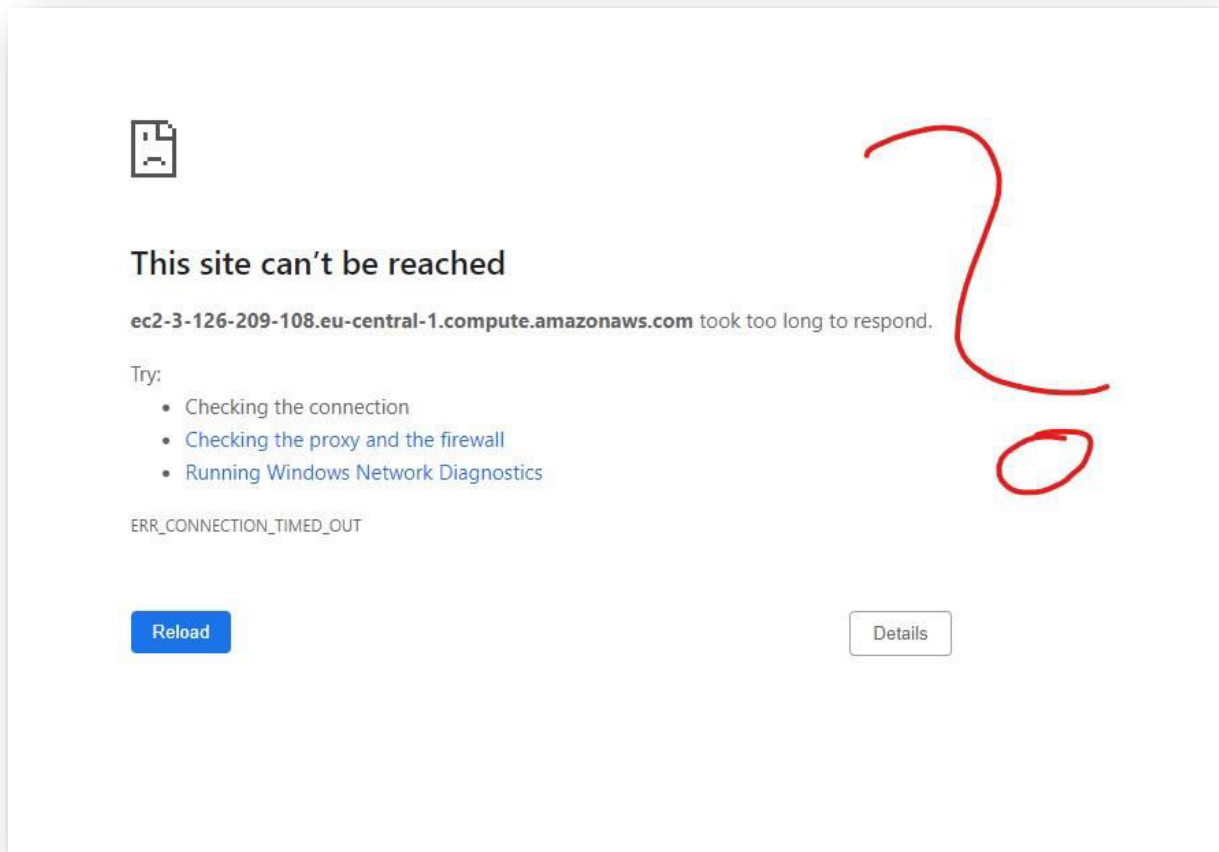
Click Launch:
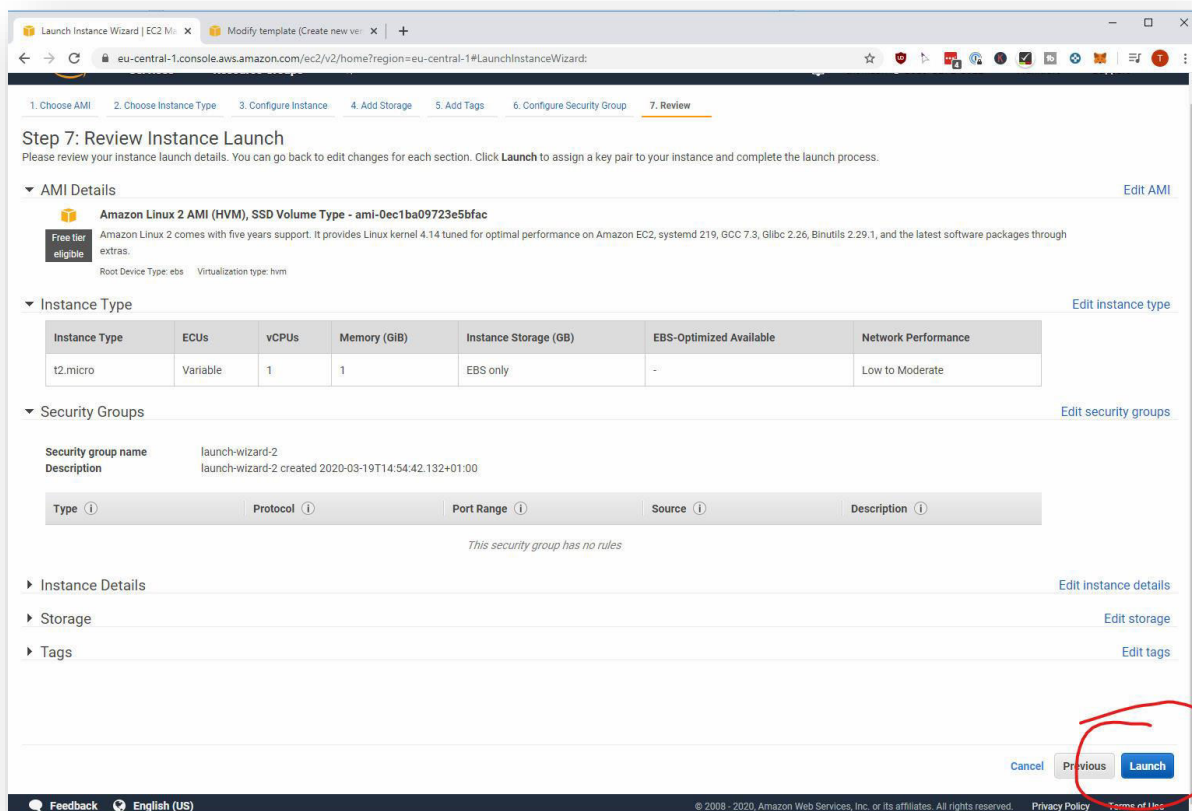
Select your Keypair you downloaded earlier and Launch Instance:
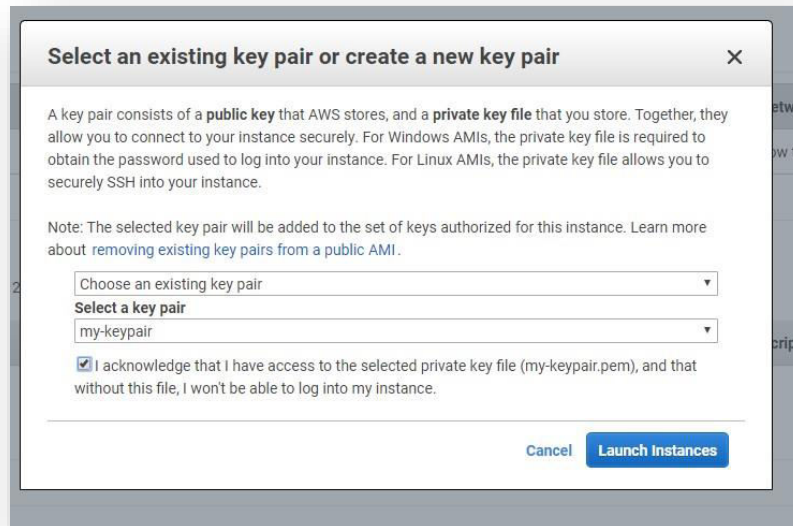
Wait until the Instance is running and copy the public DNS (or IP4)

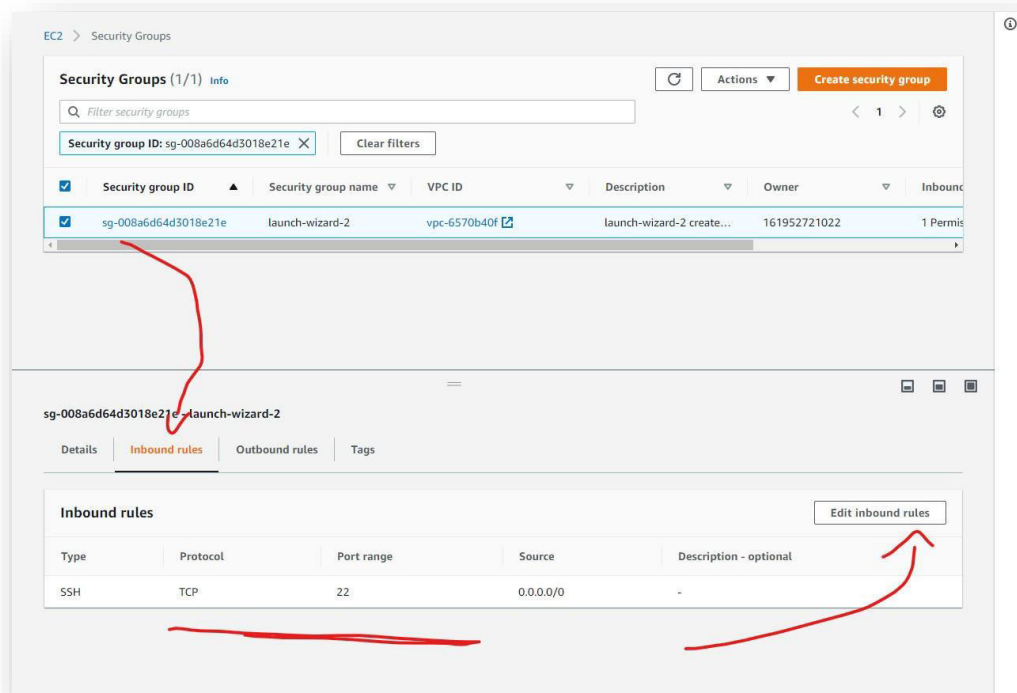Open the URL in your browser. What happens here? Why can't the site be reached?

The Security group of your Instance doesn't allow incoming connections on Port 80. We have to extend this. On the instance you see the security groups. Click on "view inbound rules":
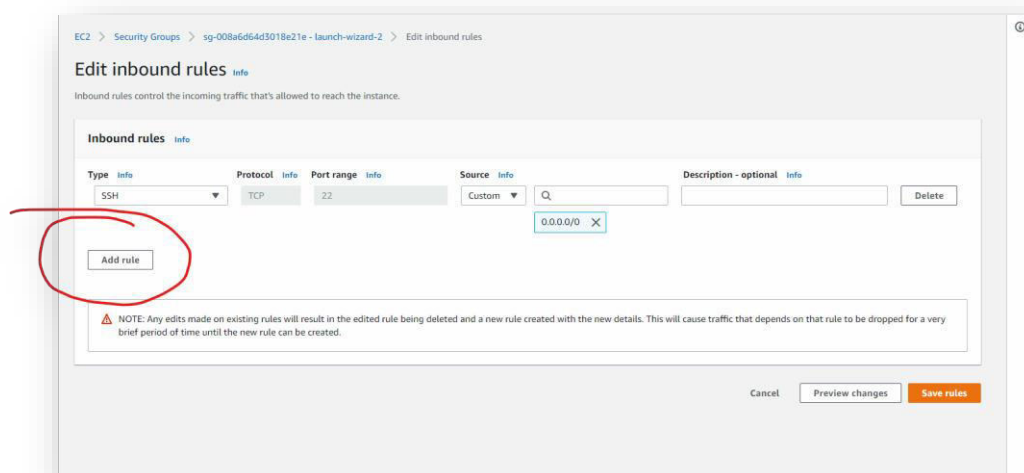

Edit the inbound rules:

Add a new Rule:

Allow HTTP from Everywhere.
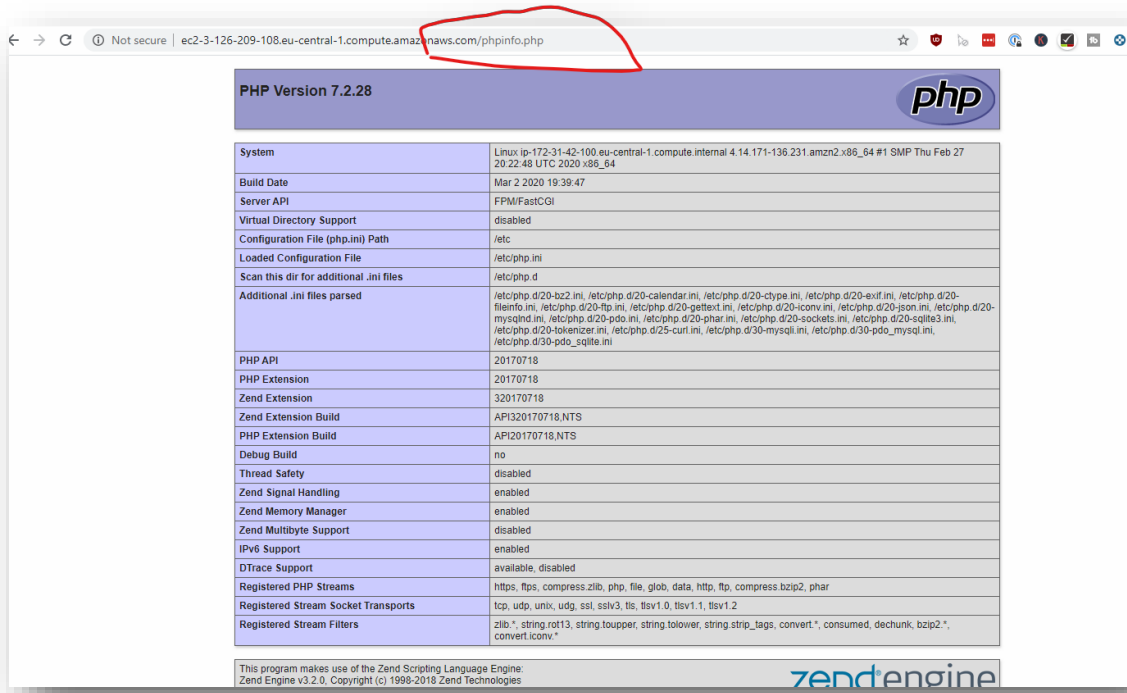
Then hit "Save rules":
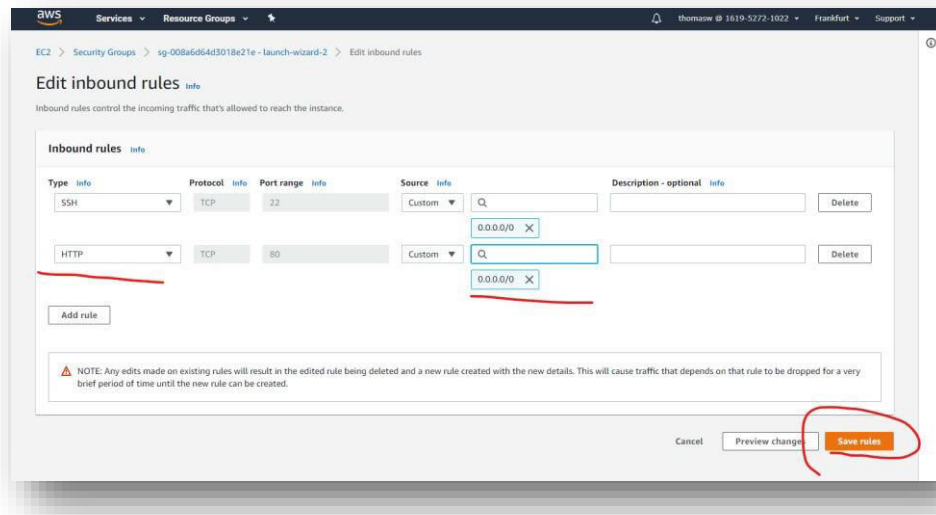
Reload the Website for the Instance and see it works now. Apache delivers the Test-Page.
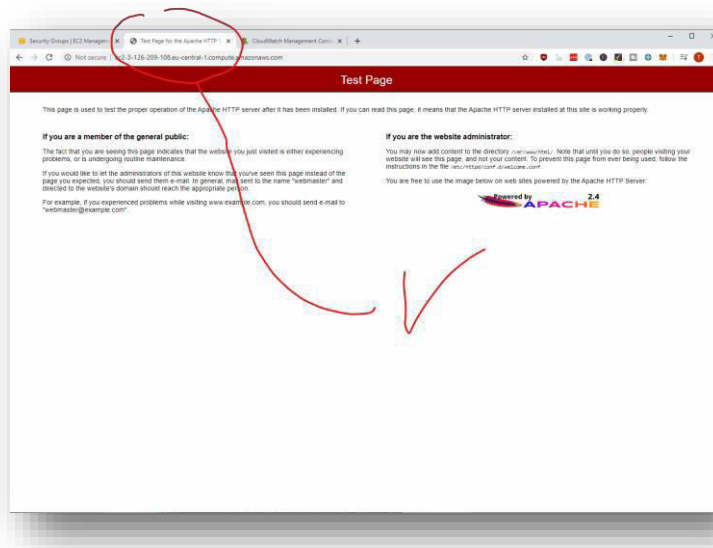
Change the URL to phpinfo.php to see the script which gets injected on startup:

Note: You can stop the instance now if you continue another day, but don't remove it, because we will need it in the next assignment for understanding the meta-data

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Lab End