[KAN-54] Day 16 : Task 7 - Complete the 4 different scenarios for creating 2 containers, providing secure access for Developers

Created: 13/Nov/24 Updated: 14/Nov/24

Status:	In Progress
Project:	cloudweb
Components:	None
Affects versions:	None
Fix versions:	None

Type:	Task	**Priority:**	Medium
Reporter:	Gautham Srinivasan	**Assignee:**	Gautham Srinivasan
Resolution:	Unresolved	**Votes:**	0
Labels:	None		
Remaining Estimate:	Not Specified		
Time Spent:	Not Specified		
Original estimate:	Not Specified		

Attachments:	image-20241114-164404.png image-20241114-155948.png image-20241114-160120.png image-20241114-162427.png image-20241114-164116.png image-20241114-164217.png image-20241114-163609.png image-20241114-163301.png image-20241114-162512.png image-20241114-163822.png image-20241114-160151.png
Rank:	0|i00065:i

Comments

Comment by Gautham Srinivasan [14/Nov/24]

scenario 1 :
trouble shooting file

FROM ubuntu
MAINTAINER Akshiv
ENV DEBIAN_FRONTEND=noninteractive
RUN apt-get update && apt-get install -y apache2
RUN mkdir /var/run/apache2
ENV APACHE_RUN_GROUP www-data
ENV APACHE_LOG_DIR /var/log/apache2:q
ENV APACHE_RUN_DIR /var/run/apache2
EXPOSE 80
CMD ["/usr/sbin/apache2", "-D", "FOREGROUND"]

scenario 2:

1) Make directory in host machine [mkdir /opt/www]
echo "welcome to docker" > /opt/www/index.html

```
[root@ip-172-31-19-133 /]# cd opt/www/
[root@ip-172-31-19-133 www]# ls
index.html
[root@ip-172-31-19-133 www]# cat index.html
welcome to docker
[root@ip-172-31-19-133 www]#
```

2)docker run -d -p "8085:80" --name=webserver -v "/opt/www:/var/www/html" httpdimage

```
[root@ip-172-31-19-133 www]# docker images
REPOSITORY          TAG       IMAGE ID       CREATED        SIZE
httpdimage          latest    8789a719e28c   21 hours ago   227MB
troubleshootimage   latest    8789a719e28c   21 hours ago   227MB
[root@ip-172-31-19-133 www]# docker container ls
CONTAINER ID   IMAGE        COMMAND                  CREATED        STATUS        PORTS
0d45cb50089b   httpdimage   "/usr/sbin/apache2 -…"   11 hours ago   Up 11 hours   0.0.0.0:8085->80/tcp, :::8085->80/tcp
[root@ip-172-31-19-133 www]#
```

check for the output in the port 8085

welcome to docker

scenario 3:
docker run -d --name db mysql

```
[ec2-user@ip-172-31-19-133 ~]$ sudo su -
Last login: Thu Nov 14 15:58:21 UTC 2024 on pts/0
[root@ip-172-31-19-133 ~]# docker run -d --name db mysql
Unable to find image 'mysql:latest' locally
latest: Pulling from library/mysql
f1a9f94fc2db: Pull complete
f98254a2b688: Pull complete
6ad83e89f981: Pull complete
a42d733ea779: Pull complete
6fd1af2601dd: Pull complete
0233a63dc5cd: Pull complete
5f31e56c9bea: Pull complete
c0fb96d14e5b: Pull complete
d57074c62694: Pull complete
7030c241d9b8: Pull complete
Digest: sha256:2be51594eba5983f47e67ff5cb87d666a223e309c6c64450f30b5c59a788ea40
Status: Downloaded newer image for mysql:latest
02ca036775107cc89cb57441705c1c2ba1269bac77e4cb16cbb8734a2a8c6627
[root@ip-172-31-19-133 ~]# docker container ps
CONTAINER ID   IMAGE         COMMAND                  CREATED         STATUS         PORTS
0d45cb50089b   httpdimage    "/usr/sbin/apache2 -…"   11 hours ago    Up 11 hours    0.0.0.0:8085->80/tcp, :::8085->80/tcp
[root@ip-172-31-19-133 ~]# docker ps -a
CONTAINER ID   IMAGE         COMMAND                  CREATED          STATUS                      PORTS
02ca03677510   mysql         "docker-entrypoint.s…"   22 seconds ago   Exited (1) 21 seconds ago
0d45cb50089b   httpdimage    "/usr/sbin/apache2 -…"   11 hours ago     Up 11 hours                 0.0.0.0:8085->80/tcp,
[root@ip-172-31-19-133 ~]#
```

check logs for the error

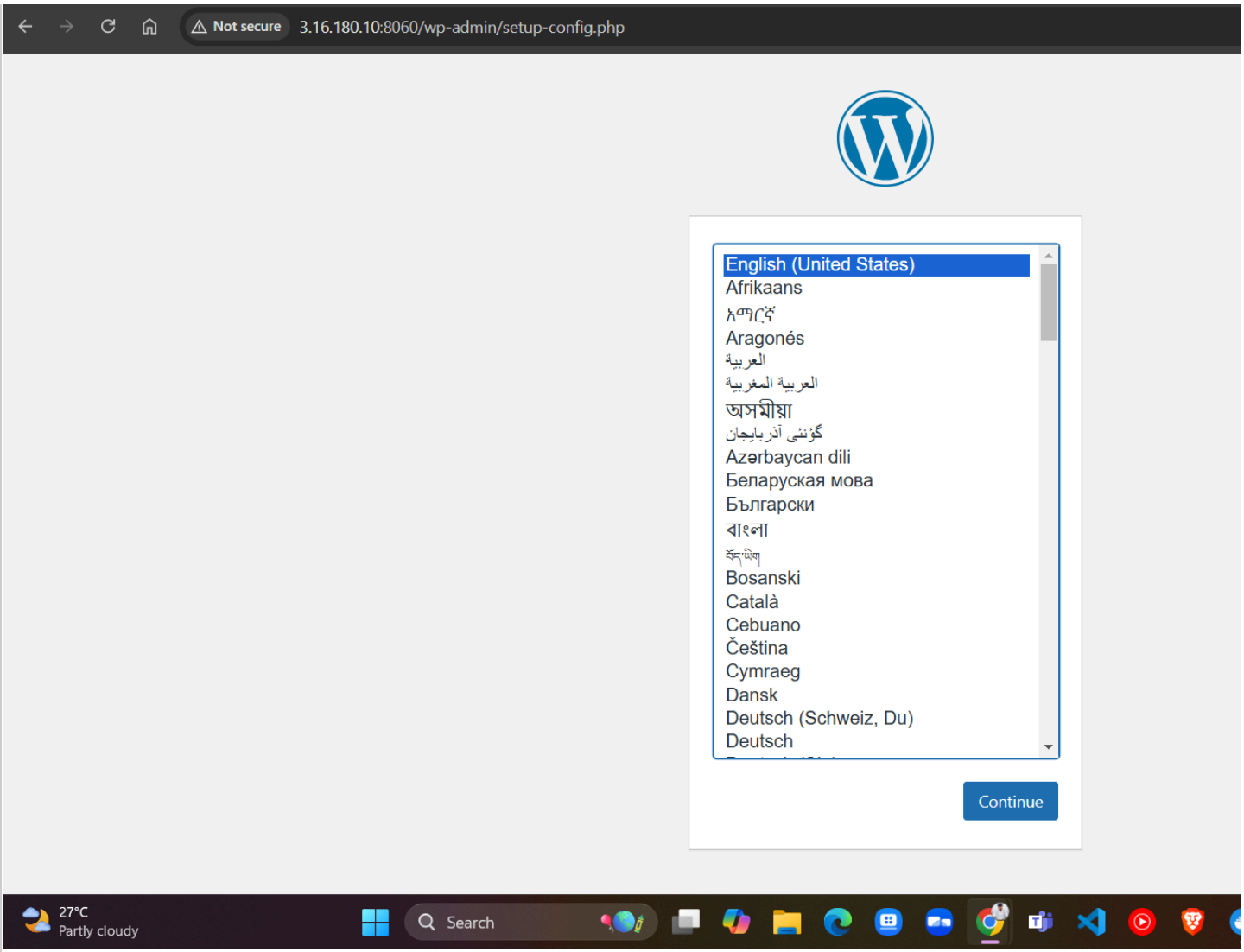
```
[root@ip-172-31-19-133 ~]# docker logs db
2024-11-14 16:23:53+00:00 [Note] [Entrypoint]: Entrypoint script for MySQL Server 9.1.0-1.el9 started.
2024-11-14 16:23:54+00:00 [Note] [Entrypoint]: Switching to dedicated user 'mysql'
2024-11-14 16:23:54+00:00 [Note] [Entrypoint]: Entrypoint script for MySQL Server 9.1.0-1.el9 started.
2024-11-14 16:23:54+00:00 [ERROR] [Entrypoint]: Database is uninitialized and password option is not specified
    You need to specify one of the following as an environment variable:
    - MYSQL_ROOT_PASSWORD
    - MYSQL_ALLOW_EMPTY_PASSWORD
    - MYSQL_RANDOM_ROOT_PASSWORD
[root@ip-172-31-19-133 ~]# s
```

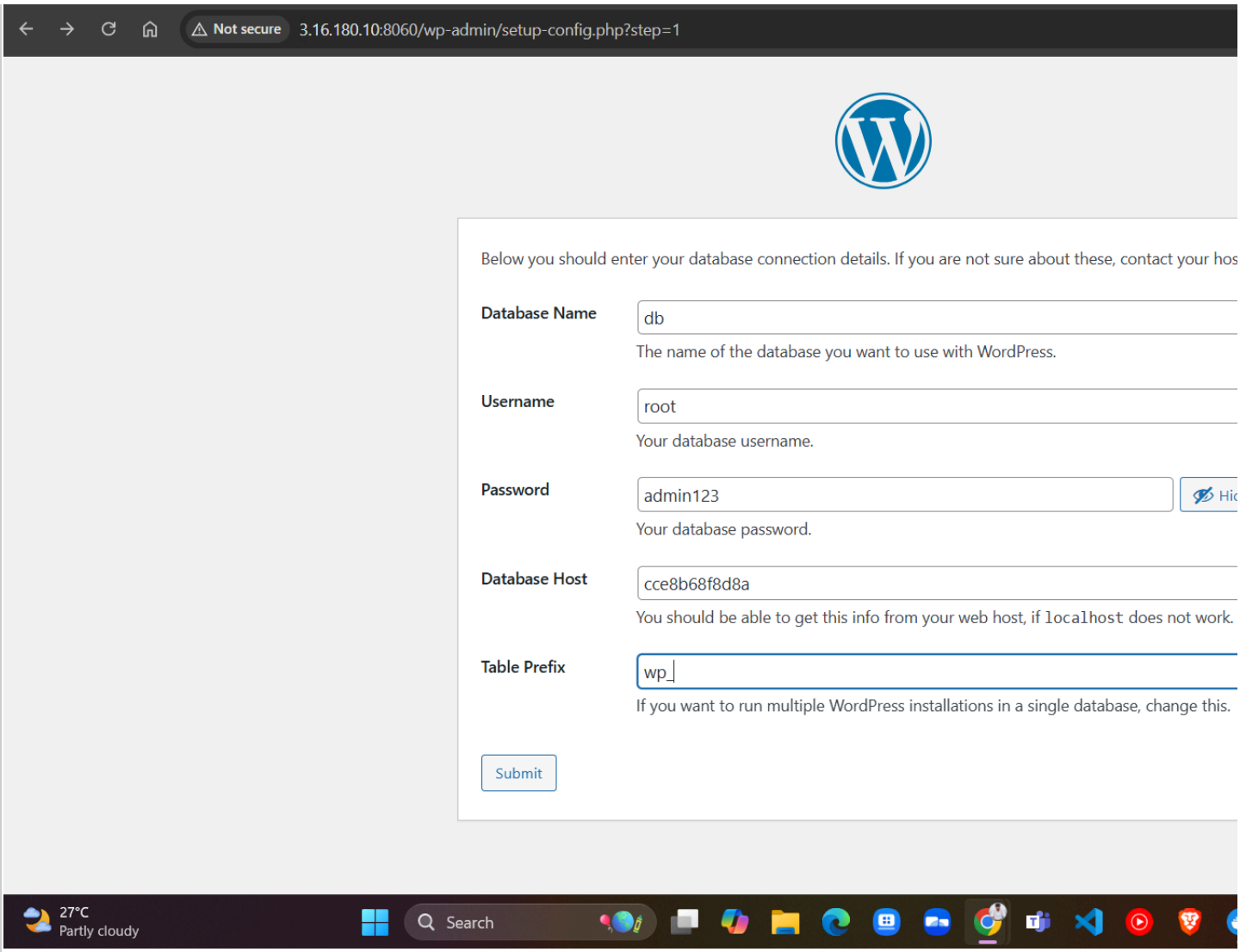
docker run -d --name db -e MYSQL_ROOT_PASSWORD=admin123 mysql

communication between 2 different container [1. mysql database is going to communicate to 2. Wordpress Application]

docker run -d --name myweb-server --link db:mysql -p "8060:80" wordpress

```
[root@ip-172-31-19-133 ~]# docker logs db
2024-11-14 16:23:53+00:00 [Note] [Entrypoint]: Entrypoint script for MySQL Server 9.1.0-1.el9 started.
2024-11-14 16:23:54+00:00 [Note] [Entrypoint]: Switching to dedicated user 'mysql'
2024-11-14 16:23:54+00:00 [Note] [Entrypoint]: Entrypoint script for MySQL Server 9.1.0-1.el9 started.
2024-11-14 16:23:54+00:00 [ERROR] [Entrypoint]: Database is uninitialized and password option is not specified
    You need to specify one of the following as an environment variable:
    - MYSQL_ROOT_PASSWORD
    - MYSQL_ALLOW_EMPTY_PASSWORD
    - MYSQL_RANDOM_ROOT_PASSWORD
[root@ip-172-31-19-133 ~]# docker rm db
db
[root@ip-172-31-19-133 ~]# docker run -d --name db -e MYSQL_ROOT_PASSWORD=admin123 mysql
cce8b68f8d8ab48b26fad05f0046964226890aa125bbb4676068189d227b242b
[root@ip-172-31-19-133 ~]# docker ps
CONTAINER ID   IMAGE        COMMAND                  CREATED          STATUS         PORTS
cce8b68f8d8a   mysql        "docker-entrypoint.s…"   10 seconds ago   Up 9 seconds   3306/tcp, 33060/tcp
0d45cb50089b   httpdimage   "/usr/sbin/apache2 -…"   11 hours ago     Up 11 hours    0.0.0.0:8085->80/tcp, :::8085->80/t
[root@ip-172-31-19-133 ~]# docker rm webserver
Error response from daemon: cannot remove container "/webserver": container is running: stop the container before removi
[root@ip-172-31-19-133 ~]# docker rm -f webserver
webserver
[root@ip-172-31-19-133 ~]# docker run -d --name myweb-server --link db:mysql -p "8060:80" wordpress
Unable to find image 'wordpress:latest' locally
latest: Pulling from library/wordpress
2d429b9e73a6: Pull complete
400f75d99009: Pull complete
e532b66579ca: Pull complete
9ac50b358b78: Pull complete
```


Not secure
3.16.180.10:8060/wp-admin/setup-config.php
English (United States)
Afrikaans
አማርኛ
Aragonés
العربية
العربية المغربية
অসমীয়া
گؤنئی آذربایجان
Azərbaycan dili
Беларуская мова
Български
বাংলা
Bosanski
Català
Cebuano
Čeština
Cymraeg
Dansk
Deutsch (Schweiz, Du)
Deutsch
Continue
27°C
Partly cloudy
Search



create a database

```
docker exec -it db mysql -uroot -p
```

```
[root@ip-172-31-19-133 ~]# docker exec -it mysql mysql -uroot -p
Error response from daemon: No such container: mysql
[root@ip-172-31-19-133 ~]# docker exec -it db mysql -uroot -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 11
Server version: 9.1.0 MySQL Community Server - GPL

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> create database wordpress;
Query OK, 1 row affected (0.04 sec)

mysql>
```
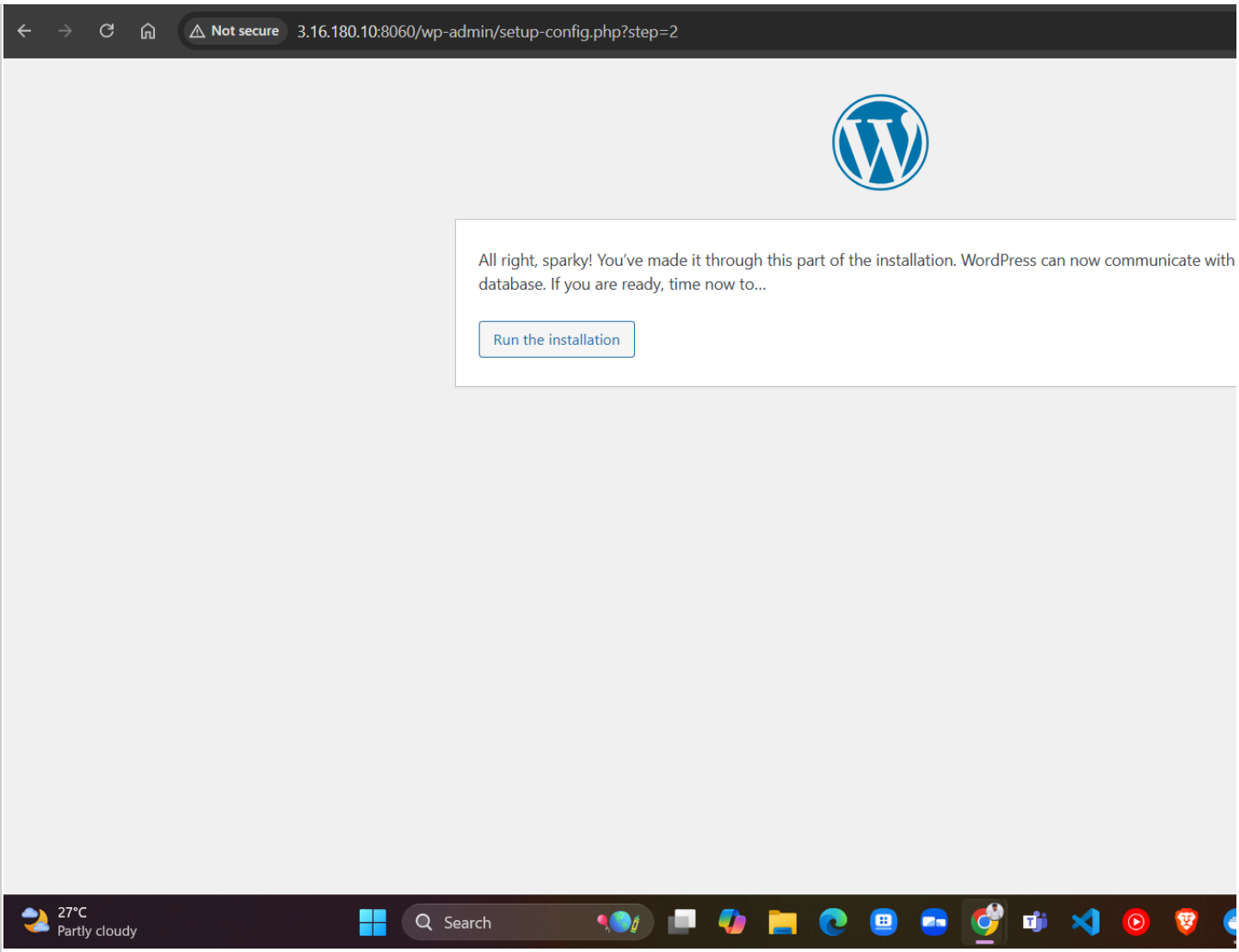
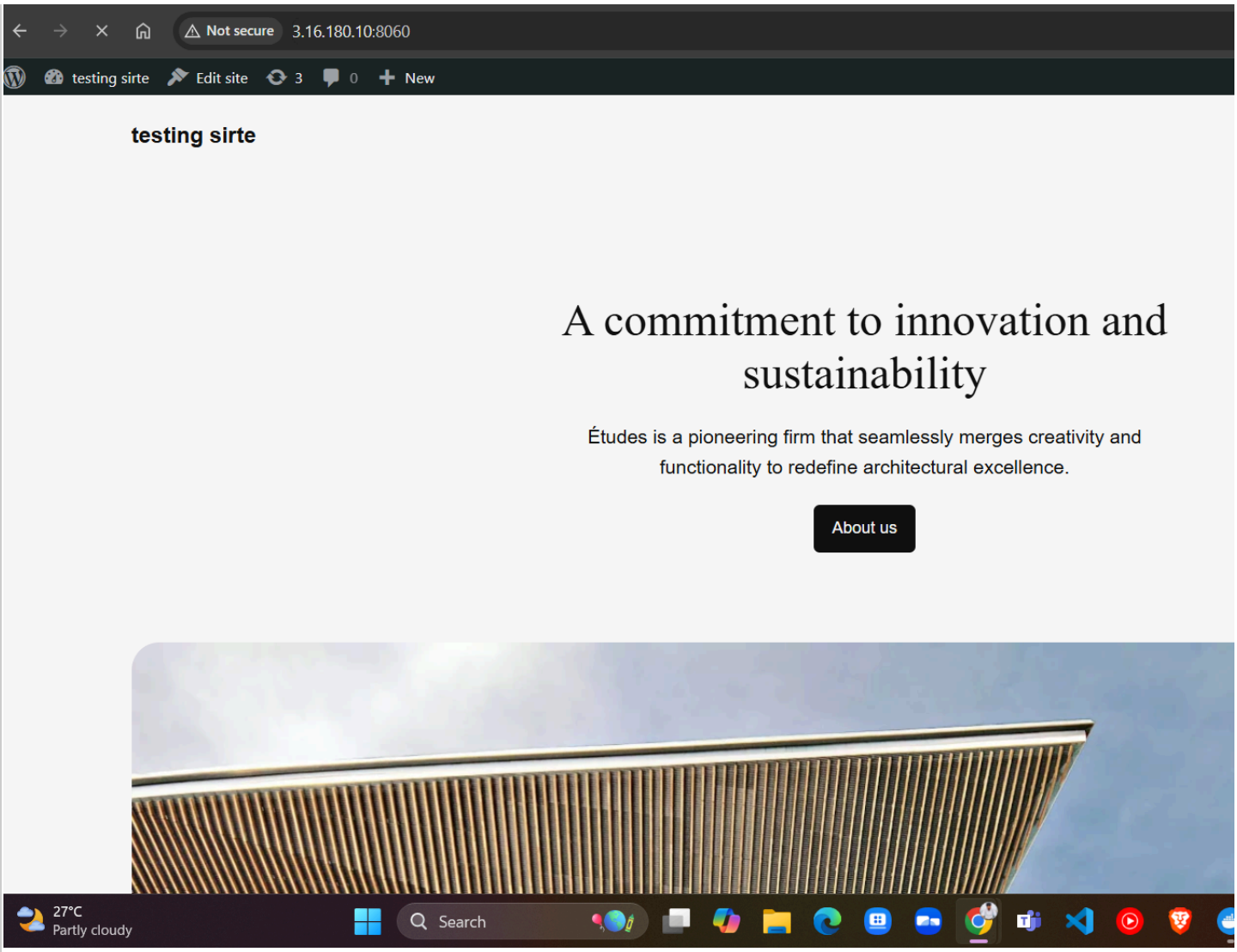

verify the connection



test site launched



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