



# Cloud web

Rohith R D | 27-09-2024

## Start a Free VM in the Cloud

I signed up for a free cloud account on AWS.

After logging in, I went to the EC2 (for AWS).

## LOGIN VIA SSH USING KALI LINUX

From my Kali Linux terminal, I connected to the VM using SSH.

```

File Actions Edit View Help
Permissions 0778 for '/home/nick/NICKI.pem' are too open.
It is required that your private key files are NOT accessible by others.
This private key will be ignored.
Load key /home/nick/NICKI.pem': bad permissions
ec2-user@3.21.129.195: Permission denied (publickey,gssapi-keyex,gssapi-with-mic).

[nick@nick ~]$ ls -l
-rw-r--r-- 1 ec2-user@3.21.129.195 /home/nick/NICKI.pem

[sudo] password for nick:
The authenticity of host '3.21.129.195 (3.21.129.195)' can't be established.
ED25519 key fingerprint is SHA256:50F8Wf//cZ2t4q/yQzELHxjXUOM3//2-qmLPMQd.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '3.21.129.195' (ED25519) to the list of known hosts.

      _   _
     | |_| | | | |
    | |_|_| |_| |
    |___|_|_|_|_|_|
        Amazon Linux 2023

https://aws.amazon.com/linux/amazon-linux-2023

[ec2-user@gig-172-31-39-96 ~]$ ping 3.21.129.195
```

## CLONING MY GIT REPOSITORY

I cloned my repository from Task 12, which contains the HTML page

[illegible]

## COPY FILES TO APACHE'S ROOT DIRECTORY

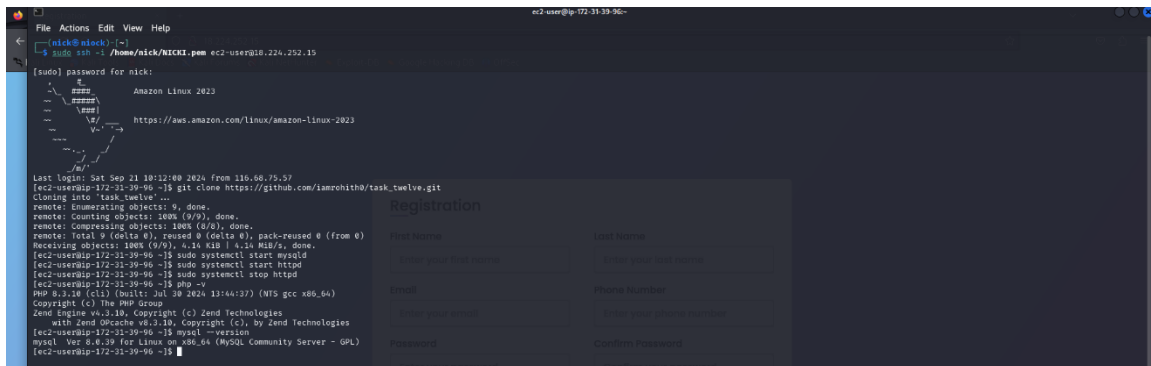
Since Apache is already installed on my VM, I copied the HTML files to the web server's root folder.

```
[ec2-user@ip-172-31-39-96 ~]$ cd task_twelve
[ec2-user@ip-172-31-39-96 task_twelve]$ ls
index.html  script.js  style.css  submit.html
[ec2-user@ip-172-31-39-96 task_twelve]$ sudo cp /home/ec2-user/task_twelve/script.js /var/www/html/
[ec2-user@ip-172-31-39-96 task_twelve]$ sudo cp /home/ec2-user/task_twelve/style.css /var/www/html/
[ec2-user@ip-172-31-39-96 task_twelve]$ sudo cp /home/ec2-user/task_twelve/submit.html /var/www/html/
[ec2-user@ip-172-31-39-96 task_twelve]$ cd ~
[ec2-user@ip-172-31-39-96 ~]$ cd /var/www/html
[ec2-user@ip-172-31-39-96 html]$ ls
index.html  info.php  script.js  style.css  submit.html  submit.php
[ec2-user@ip-172-31-39-96 html]$
```

## INSTALL PHP AND MYSQL

I already installed php and mysql and forgot to take screenshots.

For that I took versions of my php and mysql servers.



The screenshot shows a terminal window with the following content:

```
File Actions Edit View Help
[nick@nick:~]$ sudo ssh -i /home/nick/NICKI.pem ec2-user@10.224.252.15
[sudo] password for nick:
Amazon Linux 2023
https://aws.amazon.com/linux/amazon-linux-2023

Last login: Sat Sep 21 10:12:00 2024 from 116.68.75.57
[ec2-user@ip-172-31-39-96 ~]$ git clone https://github.com/imrohitho/task_twelve.git
Cloning into 'task_twelve'..
remote: Enumerating objects: 9, done.
remote: Counting objects: 100% (9/9), done.
remote: Compressing objects: 100% (9/9), done.
remote: Total 9 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (9/9), 4.18 KB | 4.24 MB/s, done.
[ec2-user@ip-172-31-39-96 ~]$ sudo systemctl start mysqld
[ec2-user@ip-172-31-39-96 ~]$ sudo systemctl start httpd
[ec2-user@ip-172-31-39-96 ~]$ sudo systemctl stop httpd
[ec2-user@ip-172-31-39-96 ~]$ php -v
PHP 8.2.18 (cli) (built: Jul 30 2024 13:44:17) (NTS gcc x86_64)
Copyright (c) The PHP Group

Zend Engine v4.3.18, Copyright (c) Zend Technologies
with Zend OPcache v8.0.18, Copyright (c), by Zend Technologies
[ec2-user@ip-172-31-39-96 ~]$ mysql --version
mysql Ver 8.0.29 for Linux on x86_64 (MySQL Community Server - GPL)
[ec2-user@ip-172-31-39-96 ~]$
```

On the right side of the terminal, there is a registration form titled "Registration" with the following fields:

First Name	Last Name
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

## CREATING DATABASE

I created a database for the for the cloud web called webapp.

```
nc2-user@ip-172-31-39-96:~$ sudo mysql -u root -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 12
Server version: 8.0.39 MySQL Community Server - GPL

Copyright (c) 2000, 2024, Oracle and/or its affiliates.
Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

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

mysql> CREATE DATABASE webapp;
Query OK, 1 row affected (0.00 sec)

mysql> CREATE USER 'webappuser'@'localhost' IDENTIFIED BY 'nick';
ERROR 1819 (HY000): Your password does not satisfy the current policy requirements
mysql> CREATE USER 'webappuser'@'localhost' IDENTIFIED BY 'pass123';
ERROR 1819 (HY000): Your password does not satisfy the current policy requirements
mysql> CREATE USER 'webappuser'@'localhost' IDENTIFIED BY 'password';
ERROR 1819 (HY000): Your password does not satisfy the current policy requirements
mysql> CREATE USER 'webappuser'@'localhost' IDENTIFIED BY 'user2003';
ERROR 1819 (HY000): Your password does not satisfy the current policy requirements
mysql> CREATE USER 'webappuser'@'localhost' IDENTIFIED BY 'Genshinluffy777#';
Query OK, 1 row affected (0.01 sec)

mysql> GRANT ALL PRIVILEGES ON webapp.* TO 'webappuser'@'localhost';
Query OK, 0 rows affected (0.01 sec)

mysql> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.01 sec)

mysql> EXIT;
Bye
nc2-user@ip-172-31-39-96:~$
```

i can also see the users who registered in the webform,

```
[sudo] password for nick1:
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 32
Server version: 11.4.2-MariaDB-4 Debian n/a

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Support MariaDB developers by giving a star at https://github.com/MariaDB/server
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> USE webapp;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

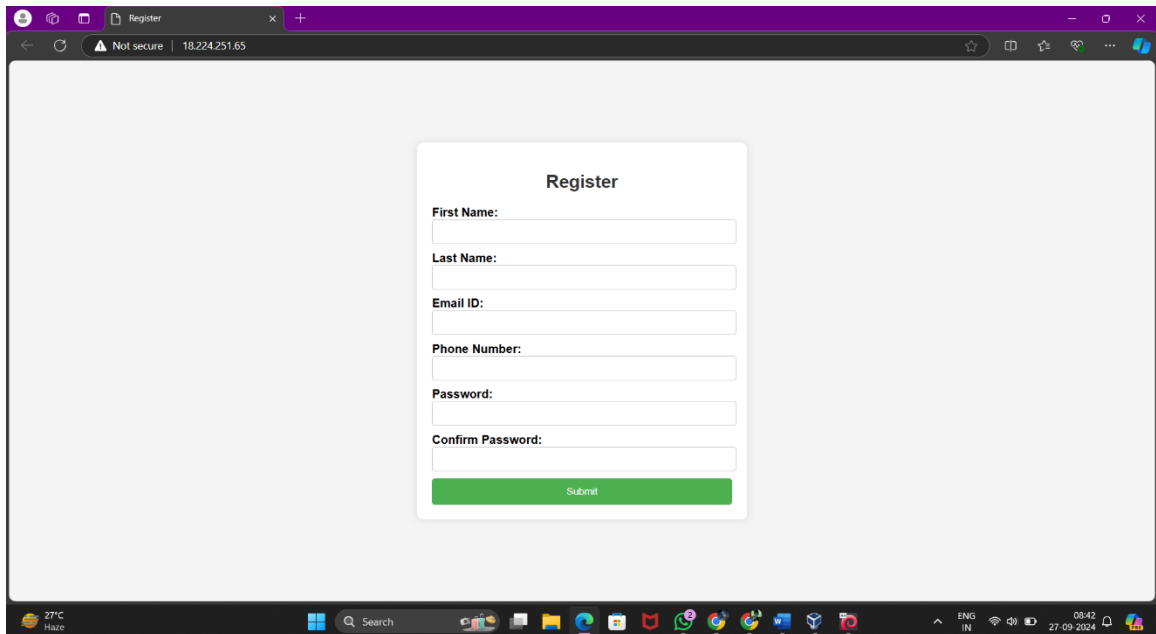
Database changed
MariaDB [webapp]> SHOW tables;
+-----+
| Tables_in_webapp |
+-----+
| registration      |
+-----+
1 row in set (0.001 sec)

MariaDB [webapp]> SELECT * FROM registration;
+----+-----+-----+-----+-----+
| id | name | email | phone_number | password |
+----+-----+-----+-----+-----+
| 1 | jack | nejdndmdju@gmail.com | 4738392920 | $2y$10$ogBAmijXAv0nuxgybUgdEe/JQ4maYWzeMxUnIByER9UqD3jET2Pju |
| 2 | jack | nejdndmdju@gmail.com | 4738392920 | $2y$10$ZVAmYcEcJ2fwu882prXXPutiddsg9kHrFPAID494iHLX8CDwoeu5a |
| 3 | jack | nejdndmdju@gmail.com | 4738392920 | $2y$10$bXqoJ76CsvS1vj.JPL96U.KKouHac5G7QBLJHeZyhDuCvQW0lyr1 |
| 4 | jfie | bankai@gmail.com | 8765432190 | $2y$10$NUKCr05EdKNaNkN9en8.3Xd6FBjv7dvTr5LJYEVQOPF4NUo58KC |
| 5 | vjfufn | dueydfnb@gmail.com | 8481292303 | $2y$10$4Mooc710fLY30oX.scknoeXv0fV8QBWDnZzqfmbF5CLYgXt47M93. |
| 6 | vjfufn | dueydfnb@gmail.com | 8481292303 | $2y$10$xp7LRiU/90p2Id3uR0of..LHnhtpao5FmbJX59ZwSgPLcRnNmJEbW |
| 7 | vjfufn | dueydfnb@gmail.com | 8481292303 | $2y$10$8r0JuUQC98Rc6j5DgJ0fujpthYUwwr2004X6y7Nsep7T11QxW/8G |
| 8 | vjfufn | dueydfnb@gmail.com | 8481292303 | $2y$10$WwUCAC2Cc3AEFuqZb04wzONms96Bv688ZrdxQxL2NFR64b5P9zBfy |
| 9 | vjfufn | dueydfnb@gmail.com | 8481292303 | $2y$10$hpVKr3kdoxXkjC69pChBve5yfc0qaW0.f8NkSra3A/6NZ73kSYIw2 |
| 10 | vjfufn | dueydfnb@gmail.com | 8481292303 | $2y$10$Fg4yrPLxQZBZTRZDniVG3.jYJEXqGe8CvrBdSodeC4ExUu6gI2nIS |
| 11 | vjfufn | dueydfnb@gmail.com | 8481292303 | $2y$10$YRmoaM4jiqaYaqrn8nhAAef/.IvLTPi8sqq7jsAwwSW18cuLJFeNG |
| 12 | nick | hjfKirjh@gmail.com | 2384937634 | $2y$10$h3McFDoRayUL2fwdadtSP.KQSJwCYJYyMmhnA13qL0SmYxoktCqny |
+----+-----+-----+-----+-----+
12 rows in set (0.001 sec)

MariaDB [webapp]>
```

## VERIFY WEB PAGE ACCESSIBILITY AND CAPTURE SCREENSHOT USING PUBLIC IP

I have the screenshots of access of my webpage through public IP,



This screenshot was from manu.