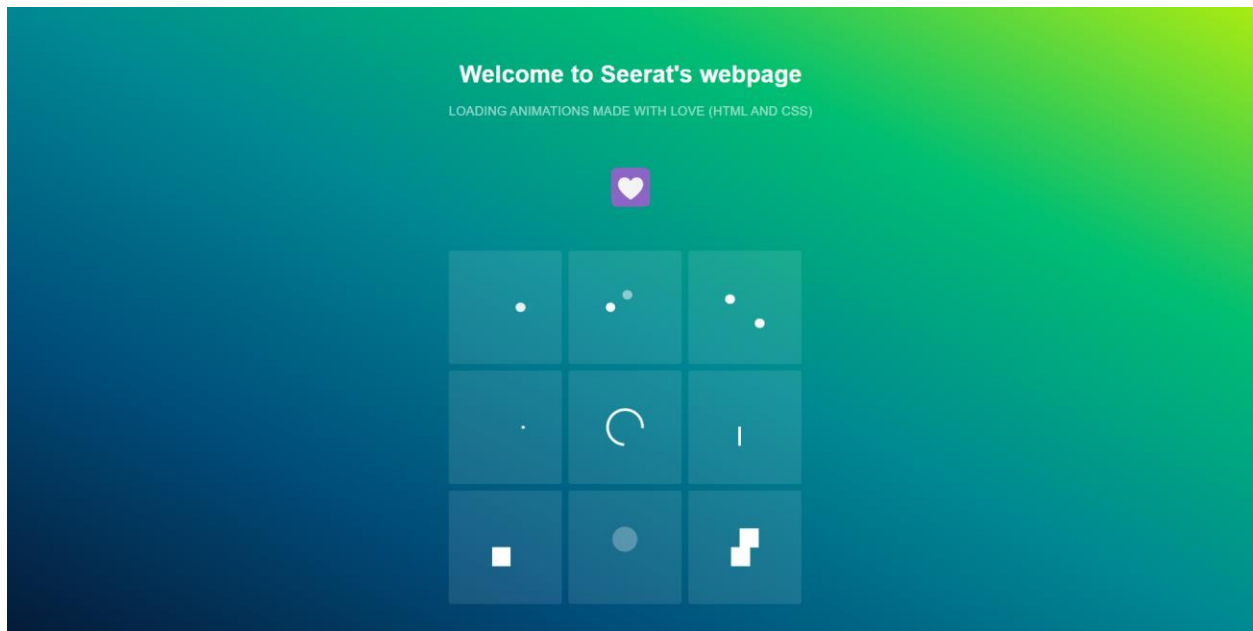


Assignment 6

Seerat



Steps->

I navigated to the AWS Management Console and entered my login credentials to access my account.

In the AWS Management Console, I searched for "EC2" and opened the EC2 Dashboard.

I selected an Amazon Machine Image (AMI), choosing Amazon Linux 2.

I chose an instance type, specifically t2.micro, which is free-tier eligible.

I configured the instance details, leaving the default settings as they were suitable for my needs.

I added storage, using the default settings provided.

I added a tag with a Key (e.g., "Name") and Value (e.g., "MyEC2Instance") to label my instance.

I configured a security group, creating a new one that allowed HTTP (port 80) and SSH (port 22) traffic.

After reviewing the settings, I clicked "Launch."

I created a new key pair, downloading the .pem file needed to connect to my instance.

I found the public IP address of my instance in the EC2 Dashboard.

I used a terminal or command prompt to connect to the instance using SSH, specifying the path to my .pem file and the instance's public IP address.

I then installed git on my instance and navigated to the desired directory on my instance.

I then cloned the repository containing the index.html file and navigated to the directory where index.html was located.

I moved the index.html file to the /var/www/html/ directory.

I updated the file permissions to make index.html readable by the web server.

I installed Apache2 on my instance.

I started the Apache service and enabled it to start on boot.

I opened a web browser and navigated to the public IP address of my instance to view the index.html file.

I edited the index.html file to update its content.

After saving the changes, I refreshed the web page to see the updated content.

I went to the EC2 Dashboard, selected my instance, and terminated it.

I faced an error and made a new inbound rule -> type – http, protocol- TCP, port range – 80, source IPv4 0.0.0.0/0

[illegible]

```

Command Prompt
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing      :                                1/1
  Installing     : git-core-2.40.1-1.amzn2023.0.3.x86_64 1/8
  Installing     : git-core-doc-2.40.1-1.amzn2023.0.3.noarch 2/8
  Installing     : perl-lib-0.65-477.amzn2023.0.6.x86_64 3/8
  Installing     : perl-TermReadKey-2.38-9.amzn2023.0.2.x86_64 4/8
  Installing     : perl-File-Find-1.37-477.amzn2023.0.6.noarch 5/8
  Installing     : perl-Error-1:0.17029-5.amzn2023.0.2.noarch 6/8
  Installing     : perl-Git-2.40.1-1.amzn2023.0.3.noarch 7/8
  Installing     : git-2.40.1-1.amzn2023.0.3.x86_64 8/8
Running scriptlet: git-2.40.1-1.amzn2023.0.3.x86_64 8/8
  Verifying     : git-2.40.1-1.amzn2023.0.3.x86_64 1/8
  Verifying     : git-core-2.40.1-1.amzn2023.0.3.x86_64 2/8
  Verifying     : git-core-doc-2.40.1-1.amzn2023.0.3.noarch 3/8
  Verifying     : perl-Error-1:0.17029-5.amzn2023.0.2.noarch 4/8
  Verifying     : perl-File-Find-1.37-477.amzn2023.0.6.noarch 5/8
  Verifying     : perl-Git-2.40.1-1.amzn2023.0.3.noarch 6/8
  Verifying     : perl-TermReadKey-2.38-9.amzn2023.0.2.x86_64 7/8
  Verifying     : perl-lib-0.65-477.amzn2023.0.6.x86_64 8/8

Installed:
  git-2.40.1-1.amzn2023.0.3.x86_64          git-core-2.40.1-1.amzn2023.0.3.x86_64
  git-core-doc-2.40.1-1.amzn2023.0.3.noarch perl-Error-1:0.17029-5.amzn2023.0.2.noarch
  perl-File-Find-1.37-477.amzn2023.0.6.noarch perl-Git-2.40.1-1.amzn2023.0.3.noarch
  perl-TermReadKey-2.38-9.amzn2023.0.2.x86_64 perl-lib-0.65-477.amzn2023.0.6.x86_64

Complete!
[ec2-user@ip-172-31-12-63 ~]$ cd /home/ec2-user
[ec2-user@ip-172-31-12-63 ~]$ cd \home\ec2-user
-bash: cd: /home/ec2-user: No such file or directory
[ec2-user@ip-172-31-12-63 ~]$ cd /home/ec2-user
[ec2-user@ip-172-31-12-63 ~]$ git clone https://github.com/EvolveNextGen/AI-101-Bootcamp-June-2024.git
Cloning into 'AI-101-Bootcamp-June-2024'...
remote: Enumerating objects: 307, done.
remote: Counting objects: 100% (174/174), done.
remote: Compressing objects: 100% (146/146), done.
remote: Total 307 (delta 63), reused 37 (delta 12), pack-reused 133
Receiving objects: 100% (307/307), 14.30 MiB | 17.50 MiB/s, done.
Resolving deltas: 100% (105/105), done.
[ec2-user@ip-172-31-12-63 ~]$ cd AI-101-Bootcamp-June-2024/Assignment6
[ec2-user@ip-172-31-12-63 Assignment6]$ sudo mv index.html /var/www/html/index.html
mv: cannot move 'index.html' to '/var/www/html/index.html': No such file or directory
[ec2-user@ip-172-31-12-63 Assignment6]$ ls -l
total 7680
-rw-r--r--. 1 ec2-user ec2-user 7759722 Jul 26 02:21 Assignment_06_Timothy.pdf
-rw-r--r--. 1 ec2-user ec2-user 96358 Jul 26 02:21 Katelyn_Assignment6.PNG
-rw-r--r--. 1 ec2-user ec2-user 1306 Jul 26 02:21 index.html
[ec2-user@ip-172-31-12-63 Assignment6]$ sudo systemctl status httpd
Unit httpd.service could not be found.
[ec2-user@ip-172-31-12-63 Assignment6]$ sudo yum install httpd -y

```

```
Command Prompt
=====
Package Architecture Version Repository Size
=====
Installing:
httpd x86_64 2.4.61-1.amzn2023 amazonlinux 47 k
Installing dependencies:
apr x86_64 1.7.2-2.amzn2023.0.2 amazonlinux 129 k
apr-util x86_64 1.6.3-1.amzn2023.0.1 amazonlinux 98 k
generic-logos-httpd noarch 18.0.0-12.amzn2023.0.3 amazonlinux 19 k
httpd-core x86_64 2.4.61-1.amzn2023 amazonlinux 1.4 M
httpd-filesystem noarch 2.4.61-1.amzn2023 amazonlinux 14 k
httpd-tools x86_64 2.4.61-1.amzn2023 amazonlinux 81 k
libbrotli x86_64 1.0.9-4.amzn2023.0.2 amazonlinux 315 k
mailcap noarch 2.1.49-3.amzn2023.0.3 amazonlinux 33 k
Installing weak dependencies:
apr-util-openssl x86_64 1.6.3-1.amzn2023.0.1 amazonlinux 17 k
mod_http2 x86_64 2.0.27-1.amzn2023.0.2 amazonlinux 166 k
mod_lua x86_64 2.4.61-1.amzn2023 amazonlinux 61 k
Transaction Summary
=====
Install 12 Packages

Total download size: 2.3 M
Installed size: 6.9 M
Downloading Packages:
(1/12): apr-util-openssl-1.6.3-1.amzn2023.0.1.x86_64.rpm 279 kB/s | 17 kB 00:00
(2/12): apr-1.7.2-2.amzn2023.0.2.x86_64.rpm 1.9 MB/s | 129 kB 00:00
(3/12): apr-util-1.6.3-1.amzn2023.0.1.x86_64.rpm 1.3 MB/s | 98 kB 00:00
(4/12): generic-logos-httpd-18.0.0-12.amzn2023.0.3.noarch.rpm 1.1 MB/s | 19 kB 00:00
(5/12): httpd-2.4.61-1.amzn2023.x86_64.rpm 2.4 MB/s | 47 kB 00:00
(6/12): httpd-filesystem-2.4.61-1.amzn2023.noarch.rpm 798 kB/s | 14 kB 00:00
(7/12): httpd-core-2.4.61-1.amzn2023.x86_64.rpm 33 MB/s | 1.4 MB 00:00
(8/12): httpd-tools-2.4.61-1.amzn2023.x86_64.rpm 2.4 MB/s | 81 kB 00:00
(9/12): libbrotli-1.0.9-4.amzn2023.0.2.x86_64.rpm 11 MB/s | 315 kB 00:00
(10/12): mailcap-2.1.49-3.amzn2023.0.3.noarch.rpm 1.5 MB/s | 33 kB 00:00
(11/12): mod_http2-2.0.27-1.amzn2023.0.2.x86_64.rpm 6.4 MB/s | 166 kB 00:00
(12/12): mod_lua-2.4.61-1.amzn2023.x86_64.rpm 2.6 MB/s | 61 kB 00:00
-----
Total 11 MB/s | 2.3 MB 00:00
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
Preparing : 1/1
Installing : apr-1.7.2-2.amzn2023.0.2.x86_64 1/12
Installing : apr-util-openssl-1.6.3-1.amzn2023.0.1.x86_64 2/12
Installing : apr-util-1.6.3-1.amzn2023.0.1.x86_64 3/12
Installing : mailcap-2.1.49-3.amzn2023.0.3.noarch 4/12
Installing : httpd-tools-2.4.61-1.amzn2023.x86_64 5/12
Installing : libbrotli-1.0.9-4.amzn2023.0.2.x86_64 6/12
```

```
Command Prompt
Installing      : generic-logos-httpd-18.0.0-12.amzn2023.0.3.noarch      11/12
Installing      : httpd-2.4.61-1.amzn2023.x86_64                      12/12
Running scriptlet: httpd-2.4.61-1.amzn2023.x86_64                      12/12
Verifying       : apr-1.7.2-2.amzn2023.0.2.x86_64                     1/12
Verifying       : apr-util-1.6.3-1.amzn2023.0.1.x86_64                 2/12
Verifying       : apr-util-openssl-1.6.3-1.amzn2023.0.1.x86_64         3/12
Verifying       : generic-logos-httpd-18.0.0-12.amzn2023.0.3.noarch     4/12
Verifying       : httpd-2.4.61-1.amzn2023.x86_64                      5/12
Verifying       : httpd-core-2.4.61-1.amzn2023.x86_64                  6/12
Verifying       : httpd-filesystem-2.4.61-1.amzn2023.noarch             7/12
Verifying       : httpd-tools-2.4.61-1.amzn2023.x86_64                 8/12
Verifying       : libbrotli-1.0.9-4.amzn2023.0.2.x86_64                9/12
Verifying       : mailcap-2.1.49-3.amzn2023.0.3.noarch                 10/12
Verifying       : mod_http2-2.0.27-1.amzn2023.0.2.x86_64              11/12
Verifying       : mod_lua-2.4.61-1.amzn2023.x86_64                    12/12

Installed:
apr-1.7.2-2.amzn2023.0.2.x86_64          apr-util-1.6.3-1.amzn2023.0.1.x86_64
apr-util-openssl-1.6.3-1.amzn2023.0.1.x86_64  generic-logos-httpd-18.0.0-12.amzn2023.0.3.noarch
httpd-2.4.61-1.amzn2023.x86_64            httpd-core-2.4.61-1.amzn2023.x86_64
httpd-filesystem-2.4.61-1.amzn2023.noarch    httpd-tools-2.4.61-1.amzn2023.x86_64
libbrotli-1.0.9-4.amzn2023.0.2.x86_64      mailcap-2.1.49-3.amzn2023.0.3.noarch
mod_http2-2.0.27-1.amzn2023.0.2.x86_64     mod_lua-2.4.61-1.amzn2023.x86_64

Complete!
[ec2-user@ip-172-31-12-63 Assignment6]$ sudo systemctl start httpd
[ec2-user@ip-172-31-12-63 Assignment6]$ sudo systemctl enable httpd
Created symlink /etc/systemd/system/multi-user.target.wants/httpd.service → /usr/lib/systemd/system/httpd.service.
[ec2-user@ip-172-31-12-63 Assignment6]$ sudo mv index.html /var/www/html/index.html
[ec2-user@ip-172-31-12-63 Assignment6]$ sudo chmod 664 /var/www/html/index.html
[ec2-user@ip-172-31-12-63 Assignment6]$ sudo systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; preset: disabled)
   Active: active (running) since Fri 2024-07-26 02:25:29 UTC; 3min 8s ago
     Docs: man:httpd.service(8)
  Main PID: 26789 (httpd)
    Status: "Total requests: 0; Idle/Busy workers 100/0; Requests/sec: 0; Bytes served/sec: 0 B/sec"
    Tasks: 177 (limit: 1114)
   Memory: 12.9M
      CPU: 156ms
  CGroup: /system.slice/httpd.service
          └─26789 /usr/sbin/httpd -DFOREGROUND
             └─26790 /usr/sbin/httpd -DFOREGROUND
                └─26791 /usr/sbin/httpd -DFOREGROUND
                   └─26792 /usr/sbin/httpd -DFOREGROUND
                      └─26793 /usr/sbin/httpd -DFOREGROUND

Jul 26 02:25:29 ip-172-31-12-63.us-east-2.compute.internal systemd[1]: Starting httpd.service - The Apache HTTP Server.
Jul 26 02:25:29 ip-172-31-12-63.us-east-2.compute.internal systemd[1]: Started httpd.service - The Apache HTTP Server.
Jul 26 02:25:29 ip-172-31-12-63.us-east-2.compute.internal httpd[26789]: Server configured, listening on: port 80
...skipping...
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; preset: disabled)
```

```

Command Prompt
Jul 26 02:25:29 ip-172-31-12-63.us-east-2.compute.internal systemd[1]: Started httpd.service - The Apache HTTP Server.
Jul 26 02:25:29 ip-172-31-12-63.us-east-2.compute.internal httpd[26789]: Server configured, listening on: port 80
...skipping...
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; preset: disabled)
   Active: active (running) since Fri 2024-07-26 02:25:29 UTC; 3min 8s ago
     Docs: man:httpd.service(8)
  Main PID: 26789 (httpd)
    Status: "Total requests: 0; Idle/Busy workers 100/0; Requests/sec: 0; Bytes served/sec: 0 B/sec"
     Tasks: 177 (limit: 1114)
    Memory: 12.9M
       CPU: 156ms
    CGroup: /system.slice/httpd.service
            └─26789 /usr/sbin/httpd -DFOREGROUND
              └─26790 /usr/sbin/httpd -DFOREGROUND
                └─26791 /usr/sbin/httpd -DFOREGROUND
                  └─26792 /usr/sbin/httpd -DFOREGROUND
                    └─26793 /usr/sbin/httpd -DFOREGROUND

Jul 26 02:25:29 ip-172-31-12-63.us-east-2.compute.internal systemd[1]: Starting httpd.service - The Apache HTTP Server.
Jul 26 02:25:29 ip-172-31-12-63.us-east-2.compute.internal systemd[1]: Started httpd.service - The Apache HTTP Server.
Jul 26 02:25:29 ip-172-31-12-63.us-east-2.compute.internal httpd[26789]: Server configured, listening on: port 80

~
~
~
~
~
~
~
~

[ec2-user@ip-172-31-12-63 Assignment6]$ ls -l /var/www/html/
total 4
-rw-rw-r--. 1 ec2-user ec2-user 1306 Jul 26 02:21 index.html
[ec2-user@ip-172-31-12-63 Assignment6]$ sudo tail -f /var/log/httpd/error_log
tail: invalid option -- '/'
Try 'tail --help' for more information.
[ec2-user@ip-172-31-12-63 Assignment6]$ sudo tail -f /var/log/httpd/error_log
[Fri Jul 26 02:25:29.474858 2024] [suexec:notice] [pid 26789:tid 26789] AH01232: suEXEC mechanism enabled (wrapper: /usr/sbin/suexec)
[Fri Jul 26 02:25:29.488689 2024] [lbmethod_heartbeat:notice] [pid 26789:tid 26789] AH02282: No slotmem from mod_heartbeat
[Fri Jul 26 02:25:29.489688 2024] [systemd:notice] [pid 26789:tid 26789] SELinux policy enabled; httpd running as context system_u:system_r:httpd_t:s0
[Fri Jul 26 02:25:29.498298 2024] [mpm_event:notice] [pid 26789:tid 26789] AH00489: Apache/2.4.61 (Amazon Linux) configured -- resuming normal operations
[Fri Jul 26 02:25:29.498332 2024] [core:notice] [pid 26789:tid 26789] AH00094: Command line: '/usr/sbin/httpd -D FOREGROUND'
^C
[ec2-user@ip-172-31-12-63 Assignment6]$ ls -Z /var/www/html/
unconfined_u:object_r:user_home_t:s0 index.html
[ec2-user@ip-172-31-12-63 Assignment6]$ sudo chcon -R -t httpd_sys_content_t /var/www/html/
[ec2-user@ip-172-31-12-63 Assignment6]$ ls -Z /var/www/html/
unconfined_u:object_r:httpd_sys_content_t:s0 index.html
[ec2-user@ip-172-31-12-63 Assignment6]$ sudo systemctl restart httpd
[ec2-user@ip-172-31-12-63 Assignment6]$ sudo cat /var/www/html/index.html
<!DOCTYPE html>

```

```
Command Prompt
[ec2-user@ip-172-31-12-63 Assignment6]$ sudo systemctl restart httpd
[ec2-user@ip-172-31-12-63 Assignment6]$ sudo cat /var/www/html/index.html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Demo Page</title>
  <style>
    body {
      font-family: Arial, sans-serif;
      margin: 0;
      padding: 0;
    }
    header {
      background-color: #4CAF50;
      color: white;
      text-align: center;
      padding: 10px 0;
    }
    footer {
      background-color: #f1f1f1;
      color: #333;
      text-align: center;
      padding: 10px 0;
      position: fixed;
      width: 100%;
      bottom: 0;
    }
    .content {
      padding: 20px;
      margin-top: 60px; /* Space for fixed header */
      margin-bottom: 60px; /* Space for fixed footer */
    }
  </style>
</head>
<body>
  <header>
    <h1>Welcome to the Demo Page</h1>
  </header>
  <div class="content">
    <p>This is the main content area. You can add your text, images, or any other HTML elements here.</p>
    <p>Feel free to style this section as you like using inline CSS or an external stylesheet.</p>
  </div>
  <footer>
    <p>&copy; 2024 Demo Page. All rights reserved.</p>
  </footer>
</body>
</html>[ec2-user@ip-172-31-12-63 Assignment6]$ sudo chmod 644 /var/www/html/index.html
[ec2-user@ip-172-31-12-63 Assignment6]$ sudo chown apache:apache /var/www/html/index.html
[ec2-user@ip-172-31-12-63 Assignment6]$ sudo nano /var/www/html/index.html
[ec2-user@ip-172-31-12-63 Assignment6]$ sudo nano /var/www/html/index.html
[ec2-user@ip-172-31-12-63 Assignment6]$ sudo nano /var/www/html/index.html
```



```
Command Prompt
margin-bottom: 60px; /* Space for fixed footer */
    }
</style>
</head>
<body>
    <header>
        <h1>Welcome to the Demo Page</h1>
    </header>
    <div class="content">
        <p>This is the main content area. You can add your text, images, or any other HTML elements here.</p>
        <p>Feel free to style this section as you like using inline CSS or an external stylesheet.</p>
    </div>
    <footer>
        <p>&copy; 2024 Demo Page. All rights reserved.</p>
    </footer>
</body>
</html>[ec2-user@ip-172-31-12-63 Assignment6]$ sudo chmod 644 /var/www/html/index.html
[ec2-user@ip-172-31-12-63 Assignment6]$ sudo chown apache:apache /var/www/html/index.html
[ec2-user@ip-172-31-12-63 Assignment6]$ sudo nano /var/www/html/index.html
[ec2-user@ip-172-31-12-63 Assignment6]$ sudo nano /var/www/html/index.html
[ec2-user@ip-172-31-12-63 Assignment6]$ sudo nano /var/www/html/index.html
[ec2-user@ip-172-31-12-63 Assignment6]$ sudo nano /var/www/html/index.html
[ec2-user@ip-172-31-12-63 Assignment6]$ sudo nano /var/www/html/index.html
[ec2-user@ip-172-31-12-63 Assignment6]$ sudo nano /var/www/html/index.html
[ec2-user@ip-172-31-12-63 Assignment6]$ sudo nano /var/www/html/index.html
[ec2-user@ip-172-31-12-63 Assignment6]$ sudo nano /var/www/html/index.html
[ec2-user@ip-172-31-12-63 Assignment6]$ sudo nano /var/www/html/index.html
[ec2-user@ip-172-31-12-63 Assignment6]$
Broadcast message from root@localhost (Fri 2024-07-26 03:08:54 UTC):

The system will power off now!

Connection to 18.119.137.114 closed by remote host.
Connection to 18.119.137.114 closed.

C:\Users\8noor>
```