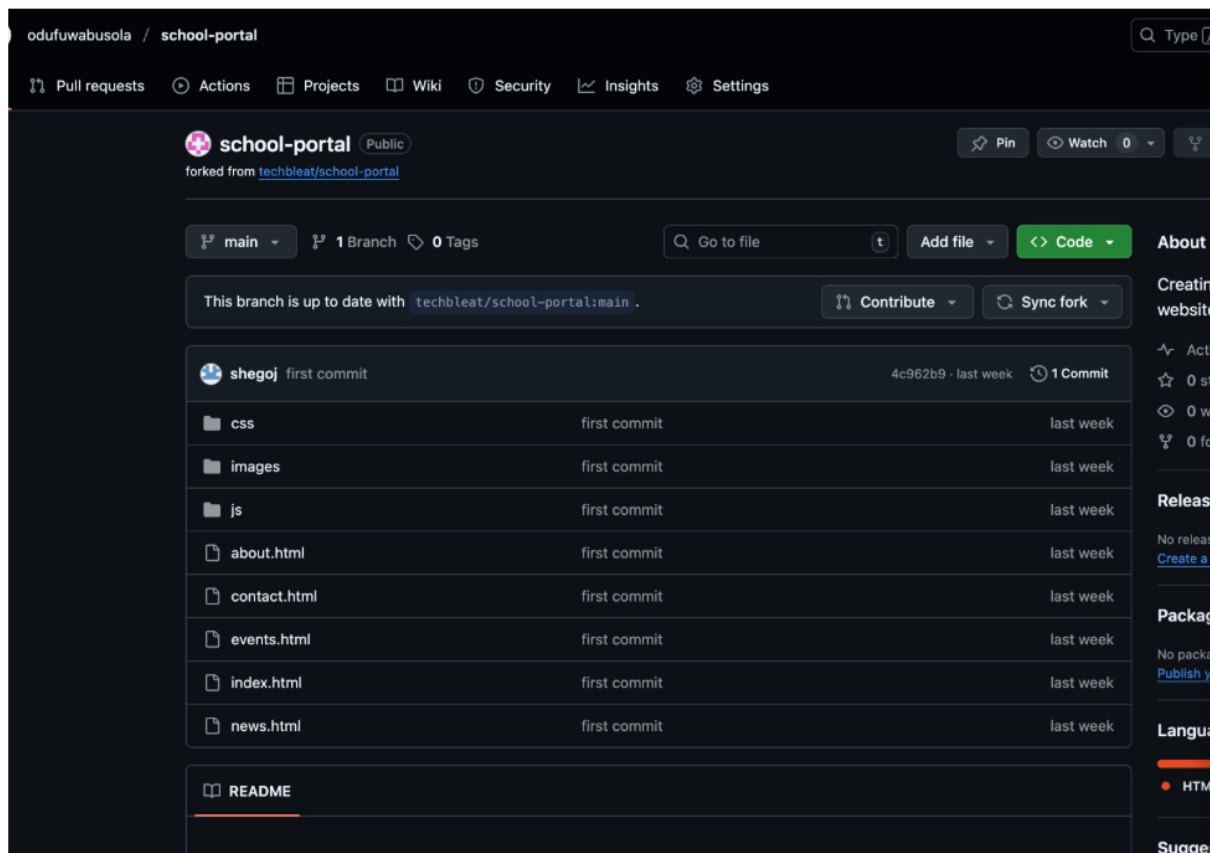


# Week 2 - DevOps Masterclass

## Deploy a static site via GitHub → VM → Nginx

Objective: Create a public web endpoint that serves a provided index.html using Nginx on a cloud VM, with the file sourced from a GitHub repository.

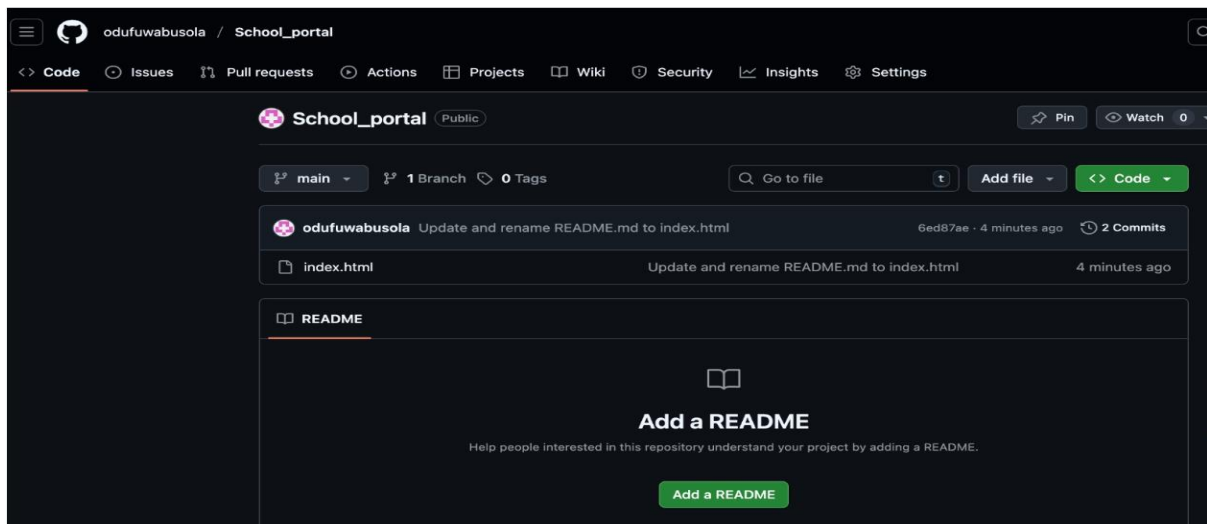
### 1. GitHub repo



- Create a new GitHub repository (public)—Please share

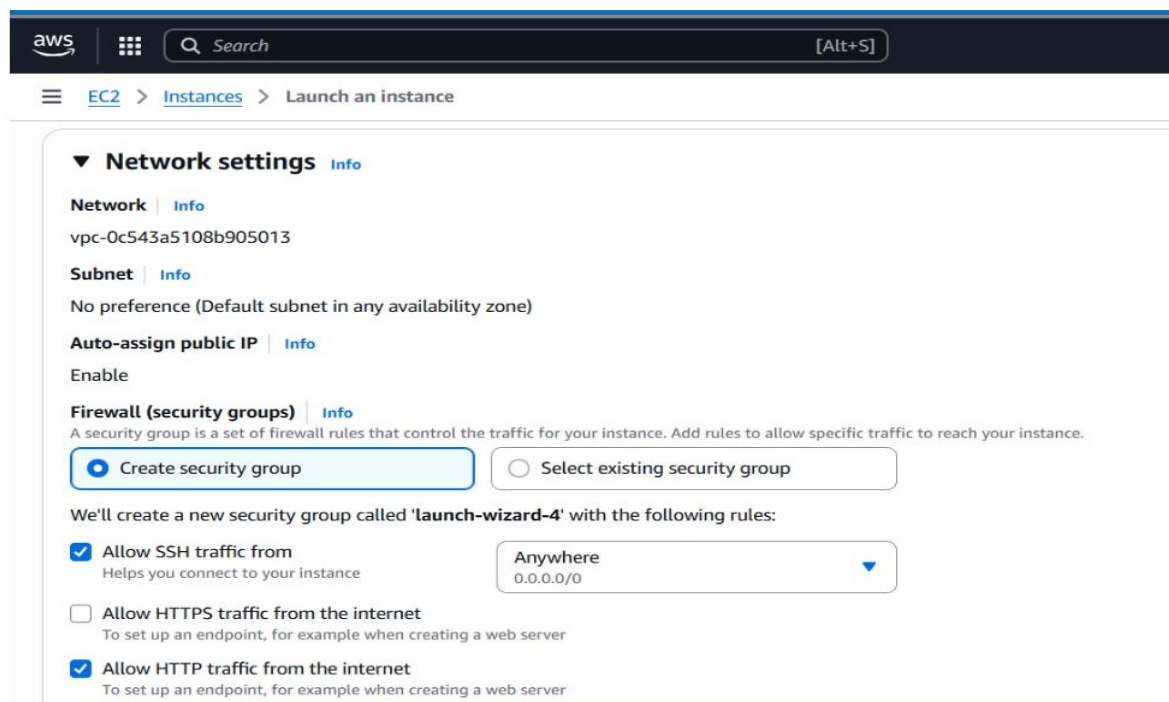
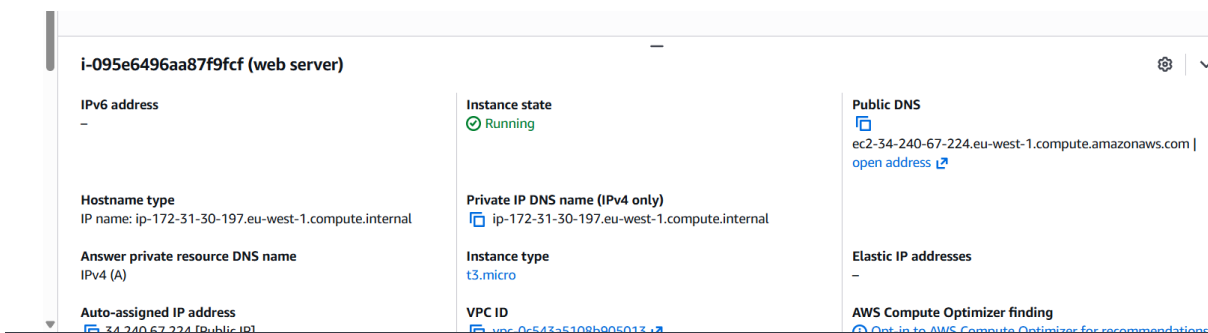
[https://github.com/odufuwabusola/School\\_portal.git](https://github.com/odufuwabusola/School_portal.git)

- Add index.html at the repo root and push it.



## 2. Cloud VM (AWS)

- Provision a small Linux VM (e.g., Amazon-Linux/Ubuntu 22.04) with inbound HTTP (80) open.



- Provide the VM's public IP or DNS. ec2-34-240-67-224.eu-west-1.compute.amazonaws.com

ec2-52-215-222-140.eu-west-1.compute.amazonaws.com

### 3. Retrieve site via Git

- SSH into the VM, install Git, and clone the repository to the VM.

```
[ec2-user@ip-172-31-30-197 ~]$ yum install git
Error: This command has to be run with superuser privileges (under the root user on most systems).
[ec2-user@ip-172-31-30-197 ~]$ sudo yum install git
Last metadata expiration check: 0:16:28 ago on Tue Oct 28 22:53:45 2025.
Dependencies resolved.
=====================================================================================================================================
 Package                                Architecture           Version                Repository              Size
Installing:
git                                     x86_64                 2.50.1-1.amzn2023.0.1  amazonlinux             53
Installing dependencies:
git-core                             x86_64                 2.50.1-1.amzn2023.0.1  amazonlinux             4.9
git-core-doc                         noarch                 2.50.1-1.amzn2023.0.1  amazonlinux             2.8
Perl-Error                           noarch                 1:0.17029-5.amzn2023.0.2  amazonlinux             41
perl-File-Find                       noarch                 1.37-477.amzn2023.0.7    amazonlinux             25
perl-Git                             noarch                 2.50.1-1.amzn2023.0.1  amazonlinux             41
perl-TermReadKey                     x86_64                 2.38-9.amzn2023.0.2     amazonlinux             36
perl-lib                             x86_64                 0.65-477.amzn2023.0.7    amazonlinux             15
Transaction Summary
-----
Install      8 Packages

Total download size: 7.9 M
Installed size: 41 M
Is this ok [y/N]: y
Downloading Packages:
```

```
[ec2-user@ip-172-31-30-197 school-portal]$ cd /tmp
[ec2-user@ip-172-31-30-197 tmp]$ pwd
/tmp
[ec2-user@ip-172-31-30-197 tmp]$ mkdir workspace
[ec2-user@ip-172-31-30-197 tmp]$ cd workspace
[ec2-user@ip-172-31-30-197 workspace]$ git clone https://github.com/techbleat/school-portal.git
Cloning into 'school-portal'...
remote: Enumerating objects: 13, done.
remote: Counting objects: 100% (13/13), done.
remote: Compressing objects: 100% (7/7), done.
remote: Total 13 (delta 4), reused 13 (delta 4), pack-reused 0 (from 0)
Receiving objects: 100% (13/13), 3.93 MiB | 28.92 MiB/s, done.
Resolving deltas: 100% (4/4), done.
[ec2-user@ip-172-31-30-197 workspace]$ ls
school-portal
[ec2-user@ip-172-31-30-197 workspace]$ cd school-portal
[ec2-user@ip-172-31-30-197 school-portal]$ ls
about.html  contact.html  css  events.html  images  index.html  js  news.html
[ec2-user@ip-172-31-30-197 school-portal]$ pwd
/tmp/workspace/school-portal
```

### 4. Install & configure Nginx

- Install Nginx.

```
[ec2-user@ip-172-31-30-197 ~]$ sudo yum install nginx
Amazon Linux 2023 Kernel Livepatch repository                                274 kB/s | 28 kB    00:00
Dependencies resolved.
=====================================================================================================================================
 Package                                Architecture           Version                Repository              Size
Installing:
nginx                                     x86_64                 1:1.28.0-1.amzn2023.0.2  amazonlinux             33
Installing dependencies:
generic-logos-httpd                   noarch                 18.0.0-12.amzn2023.0.3  amazonlinux             19
gperftools-libs                       x86_64                 2.9.1-1.amzn2023.0.3    amazonlinux             308
libunwind                             x86_64                 1.4.0-5.amzn2023.0.3    amazonlinux             66
nginx-core                             x86_64                 1:1.28.0-1.amzn2023.0.2  amazonlinux             686
nginx-filesystem                      noarch                 1:1.28.0-1.amzn2023.0.2  amazonlinux             9.6
nginx-mime-types                      noarch                 2.1.49-3.amzn2023.0.3    amazonlinux             21
Transaction Summary
-----
Install      7 Packages

Total download size: 1.1 M
Installed size: 3.7 M
Is this ok [y/N]: y
Downloading Packages:
(1/7): generic-logos-httpd-18.0.0-12.amzn2023.0.3.noarch.rpm                382 kB/s | 19 kB    00:00
(2/7): libunwind-1.4.0-5.amzn2023.0.3.x86_64.rpm                          1.2 MB/s | 66 kB    00:00
(3/7): gperftools-libs-2.9.1-1.amzn2023.0.3.x86_64.rpm                    4.4 MB/s | 308 kB    00:00
```

```

Verifying      : libunwind-1.4.0-5.amzn2023.0.3.x86_64
Verifying      : nginx-1:1.28.0-1.amzn2023.0.2.x86_64
Verifying      : nginx-core-1:1.28.0-1.amzn2023.0.2.x86_64
Verifying      : nginxfilesystem-1:1.28.0-1.amzn2023.0.2.noarch
Verifying      : nginx-mimetypes-2.1.49-3.amzn2023.0.3.noarch

WARNING:
A newer release of "Amazon Linux" is available.

Available Versions:

Version 2023.9.20251027:
Run the following command to upgrade to 2023.9.20251027:
    dnf upgrade --releasever=2023.9.20251027

Release notes:
    https://docs.aws.amazon.com/linux/al2023/release-notes/relnotes-2023.9.20251027.html

Installed:
generic-logos-httpd-19.0.0-12.amzn2023.0.3.noarch      gperftools-libs-2.9.1-1.amzn2023.0.3.x86_64      libunwind-1.4.0-5.amzn2023.0.3.x86_64
nginx-1:1.28.0-1.amzn2023.0.2.x86_64                  nginx-core-1:1.28.0-1.amzn2023.0.2.x86_64        nginxfilesystem-1:1.28.0-1.amzn2023.0.2.noarch
nginx-mimetypes-2.1.49-3.amzn2023.0.3.noarch

complete!

```

- Place index.html in Nginx's web root

```

[ec2-user@ip-172-31-30-197 school-portal]$ sudo cp -r * /usr/share/nginx/html/
[ec2-user@ip-172-31-30-197 school-portal]$

```

- Start/enable Nginx and verify it serves index.html.

## Welcome to nginx!

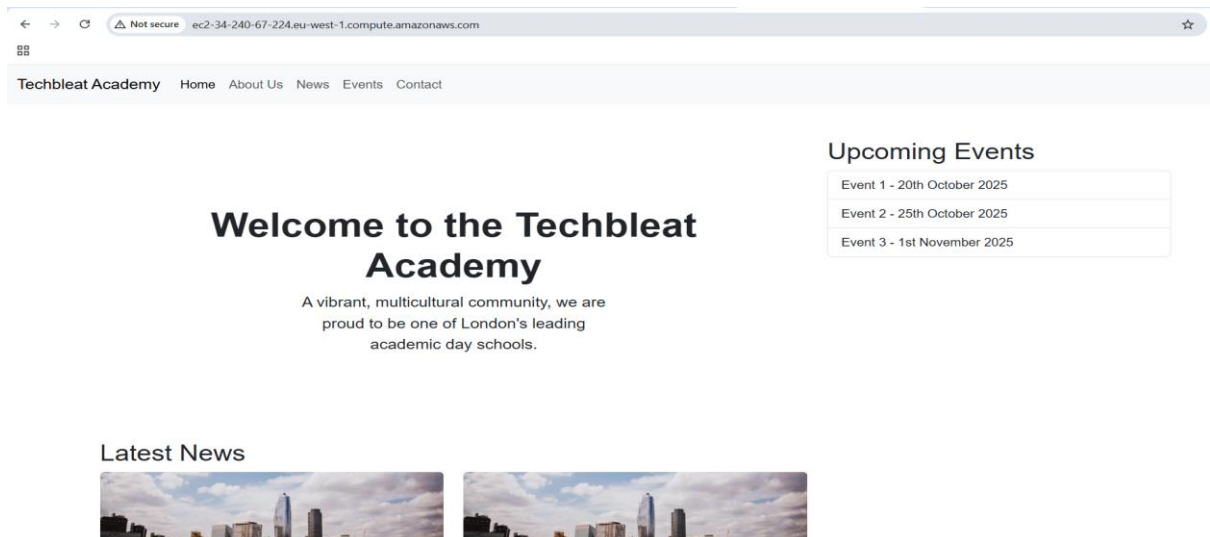
If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to [nginx.org](https://nginx.org).  
Commercial support is available at [nginx.com](https://nginx.com).

*Thank you for using nginx.*

### 5. Verification

- Access the VM's public IP/DNS over HTTP and confirm the page loads.



- URL: <http://ec2-34-240-67-224.eu-west-1.compute.amazonaws.com>
- Commands used.

```
1  uptime
2  sudo yum install nginx
3  sudo service nginx start
4  pwd
5  yum install git
6  sudo yum install git
7  mkdir workspace
8  git clone https://github.com/techbleat/documentation-week2.git
9  ls
10 cd workspace
11 git clone https://github.com/techbleat/school-portal.git
12 ls
13 cd school-portal
14 ls
15 ls -ltr
16 ls /usr/share/nginx
17 ls /usr/share/nginx/html/
18 ls /usr/share/nginx/html/
19 pwd
20 ls
21 cp -r * /usr/share/nginx/html/
22 cp -r * /usr/share/nginx/html
23 cp -r * /usr/share/nginx/html/
24 ls -ltr
25 pwd
26 cd /tmp
27 pwd
```

```
17  ls /usr/share/nginx
18  ls /usr/share/nginx/html/
19  pwd
20  ls
21  cp -r * /usr/share/nginx/html/
22  cp -r * /usr/share/nginx/html
23  cp -r * /usr/share/nginx/html/
24  ls -ltr
25  pwd
26  cd /tmp
27  pwd
28  mkdir workspace
29  cd workspace
30  git clone https://github.com/techbleat/school-portal.git
31  ls
32  cd school-portal
33  ls
34  pwd
35  ls -ltr
36  ls
37  ls /usr/share/nginx/html
38  ls -ltr
39  cp -r * /usr/share/nginx/html/
40  sudo cp -r * /usr/share/nginx/html/
41  sudo service nginx start
42  history
ec2-user@ip-172-31-30-197 school-portal]$
```