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AN AUTONOMOUS INSTITUTION**



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Course Name : Microsoft azure Fundamentals
Company : Pinesphere Solution,Coimbatore
Start Date : 06-08-2024
End Date : 10-08-2024
Github : <https://github.com/KausikaSubramani/portfolio>

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CREATING A VIRTUAL MACHINE (VM) IN MICROSOFT AZURE:

Creating A Virtual Machine (Vm) In Microsoft Azure Involves The Following Steps:

1. Sign in to the Azure portal.
2. Navigate to "Create a resource" and select "Virtual Machine."
3. Choose a subscription, resource group, and region.
4. Configure VM settings, including size, OS, and storage.
5. Set up networking, security, and management options.
6. Review and create the VM, then monitor its deployment.

The VM will be ready to use after deployment.

The screenshot shows the 'Education | Overview' page in the Azure portal. The left sidebar has a search bar and a list of links: 'Overview', 'Learning resources', and 'Need help?'. The main content area has tabs for 'Get started' and 'Overview'. Under 'Overview', there is a 'Student offer details' section showing 'Available credits' of 'US\$95 out of US\$100' and 'Days until credit expires' as '363', with an expiration date of '07/08/2025'.

The screenshot shows the Microsoft Azure portal home page. The top navigation bar includes the 'Microsoft Azure' logo, a search bar, and a 'Copilot' button. Below the navigation bar, there are sections for 'Azure services' and 'Resources'. The 'Resources' section has tabs for 'Recent' and 'Favorite'. The 'Recent' tab is active, showing a table of resources.

Name	Type	Last Viewed
kkausika	Static Web App	32 minutes ago
kausika	Resource group	33 minutes ago
kkausikavm	Storage account	34 minutes ago
kausika-nsg	Network security group	18 hours ago
kkausika	Resource group	18 hours ago
myvm	Virtual machine	18 hours ago
kkausika	Virtual machine	18 hours ago

At the bottom right, there is a message: 'Activate Windows. Go to Settings to activate Windows.'

HOST A WEBSITE FROM GITHUB ON A VIRTUAL MACHINE (VM) IN MICROSOFT AZURE

COMMANDS

Requesting a Cloud Shell.Succeeded.
Connecting terminal...

Your Cloud Shell session will be ephemeral so no files or system changes will persist beyond your current session.

kkausika [~]\$ ssh kkausika@20.246.80.1

kkausika@20.246.80.1's password:

Welcome to Ubuntu 24.04 LTS (GNU/Linux 6.8.0-1010-azure x86_64)

* Documentation: <https://help.ubuntu.com>

* Management: <https://landscape.canonical.com>

* Support: <https://ubuntu.com/pro>

System information as of Fri Aug 9 07:36:08 UTC 2024

System load: 0.0 Processes: 135
Usage of /: 5.8% of 28.02GB Users logged in: 0
Memory usage: 2% IPv4 address for eth0: 10.2.0.4
Swap usage: 0%

Expanded Security Maintenance for Applications is not enabled.

7 updates can be applied immediately.

7 of these updates are standard security updates.

To see these additional updates run: apt list --upgradable

Enable ESM Apps to receive additional future security updates.

See <https://ubuntu.com/esm> or run: sudo pro status

Last login: Fri Aug 9 06:27:38 2024 from 4.186.10.21

kkausika@kkausika:~\$ sudo apt update

Hit:1 <http://azure.archive.ubuntu.com/ubuntu> noble InRelease

Get:2 <http://azure.archive.ubuntu.com/ubuntu> noble-updates InRelease [126 kB]

Hit:3 <http://azure.archive.ubuntu.com/ubuntu> noble-backports InRelease

Get:4 <http://azure.archive.ubuntu.com/ubuntu> noble-security InRelease [126 kB]

Get:5 <http://azure.archive.ubuntu.com/ubuntu> noble-updates/main amd64 Packages [344 kB]

Get:6 <http://azure.archive.ubuntu.com/ubuntu> noble-updates/main Translation-en [86.7 kB]

Get:7 <http://azure.archive.ubuntu.com/ubuntu> noble-updates/universe amd64 Packages [321 kB]

Get:8 <http://azure.archive.ubuntu.com/ubuntu> noble-updates/restricted amd64 Packages [241 kB]

Get:9 <http://azure.archive.ubuntu.com/ubuntu> noble-updates/restricted Translation-en [47.0 kB]

Get:10 <http://azure.archive.ubuntu.com/ubuntu> noble-security/main amd64 c-n-f Metadata [3696 B]

Fetch 1295 kB in 1s (2303 kB/s)

Reading package lists... Done

Building dependency tree... Done

Reading state information... Done

16 packages can be upgraded. Run 'apt list --upgradable' to see them.

kkausika@kkausika:~\$ sudo apt install git

Reading package lists... Done

Building dependency tree... Done

```

Reading state information... Done
git is already the newest version (1:2.43.0-1ubuntu7.1).
0 upgraded, 0 newly installed, 0 to remove and 16 not upgraded.
kkausika@kkausika:~$ sudo apt install nginx
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
nginx is already the newest version (1.24.0-2ubuntu7).
0 upgraded, 0 newly installed, 0 to remove and 16 not upgraded.
kkausika@kkausika:~$ ^[[200~sudo systemctl start nginx~
sudo: command not found
kkausika@kkausika:~$ sudo systemctl start nginx
kkausika@kkausika:~$ sudo systemctl enable nginx
Synchronizing state of nginx.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable nginx
kkausika@kkausika:~$ cd /var/www/html
kkausika@kkausika:/var/www/html$ sudo rm -rf *
kkausika@kkausika:/var/www/html$ sudo git clone https://github.com/KausikaSubramani/browny.git .
fatal: destination path '.' already exists and is not an empty directory.
kkausika@kkausika:/var/www/html$ ^C
kkausika@kkausika:/var/www/html$ cd /var/www
kkausika@kkausika:/var/www$ sudo rm -rf *
kkausika@kkausika:/var/www$ sudo mkdir -p html
kkausika@kkausika:/var/www$ cd html
kkausika@kkausika:/var/www/html$ sudo git clone https://github.com/KausikaSubramani/browny.git .
Cloning into '.'...
remote: Enumerating objects: 82, done.
remote: Counting objects: 100% (82/82), done.
remote: Compressing objects: 100% (77/77), done.
remote: Total 82 (delta 3), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (82/82), 1.29 MiB | 9.85 MiB/s, done.
Resolving deltas: 100% (3/3), done.
kkausika@kkausika:/var/www/html$ sudo chown -R www-data:www-data /var/www/html
kkausika@kkausika:/var/www/html$

```

```

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Memory usage: 2%          IPv4 address for eth0: 10.2.0.4
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kkausika@kkausika:/var/www/html$ cd /var/www
kkausika@kkausika:/var/www$ sudo rm -rf *
kkausika@kkausika:/var/www$ sudo mkdir -p html
kkausika@kkausika:/var/www$ cd html
kkausika@kkausika:/var/www/html$ sudo git clone https://github.com/KausikaSubramani/browny.git .

```

```

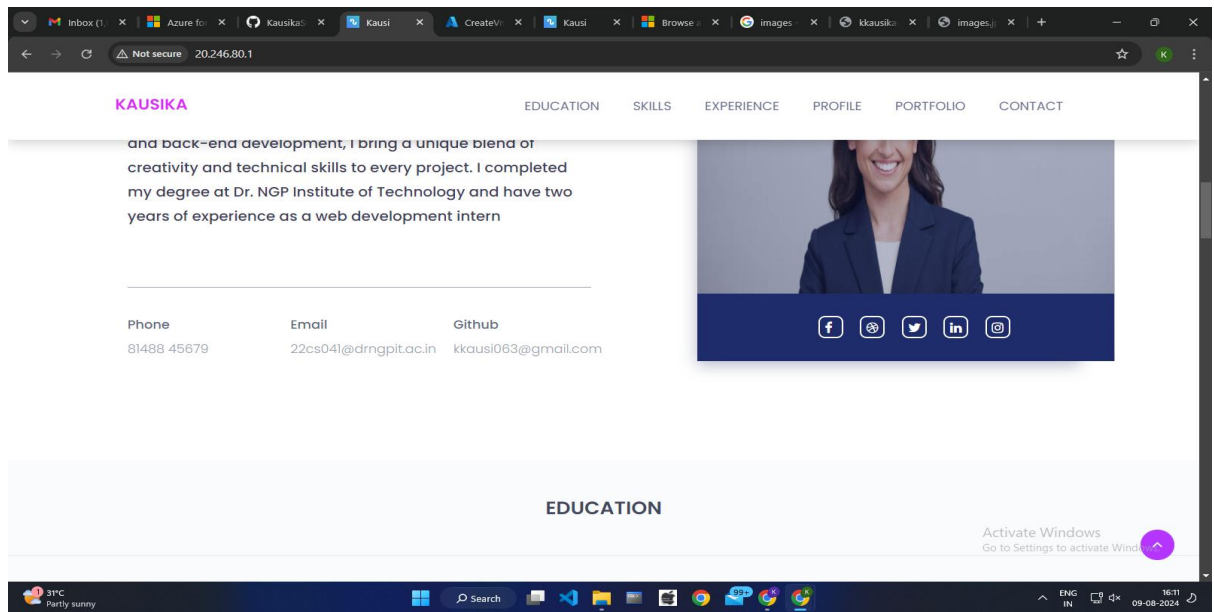
Cloning into '.'...
remote: Enumerating objects: 82, done.
remote: Counting objects: 100% (82/82), done.
remote: Compressing objects: 100% (77/77), done.
remote: Total 82 (delta 3), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (82/82), 1.29 MiB | 9.85 MiB/s, done.
Resolving deltas: 100% (3/3), done.
kkausika@kkausika:/var/www/html$ sudo chown -R www-data:www-data /var/www/html
kkausika@kkausika:/var/www/html$

```

CREATION OF STORAGE ACCOUNT IN MICROSOFT:

To Create A Storage Account In Microsoft Azure, Follow These Steps:

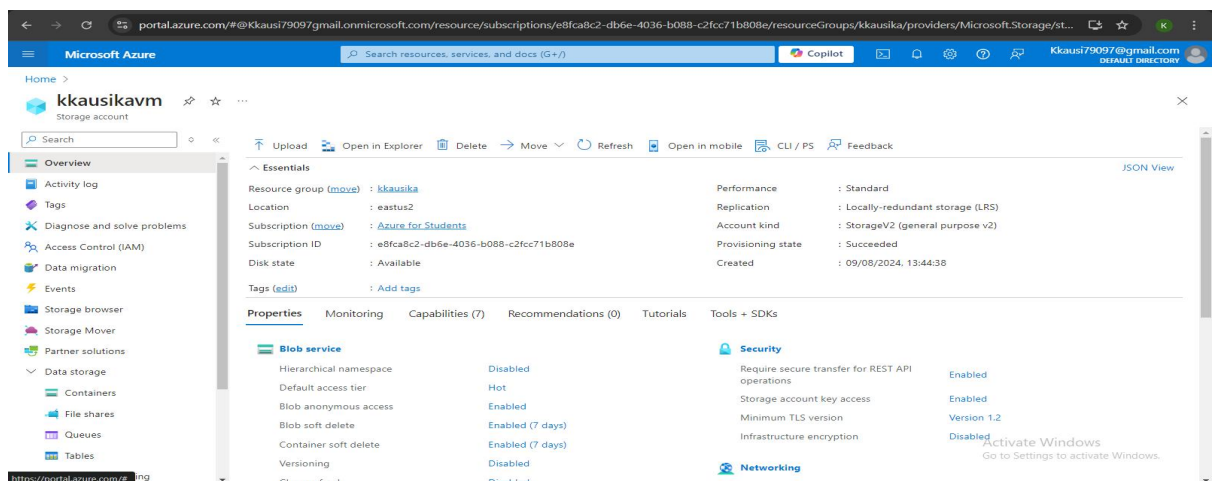
1. Sign in to Azure Portal.
2. Create a Resource
3. Configure the Basics
4. Set Advanced Options
5. Review and Create
6. Access the Storage Account
7. After deployment, access the storage account to manage containers, blobs, files, tables, or queues.



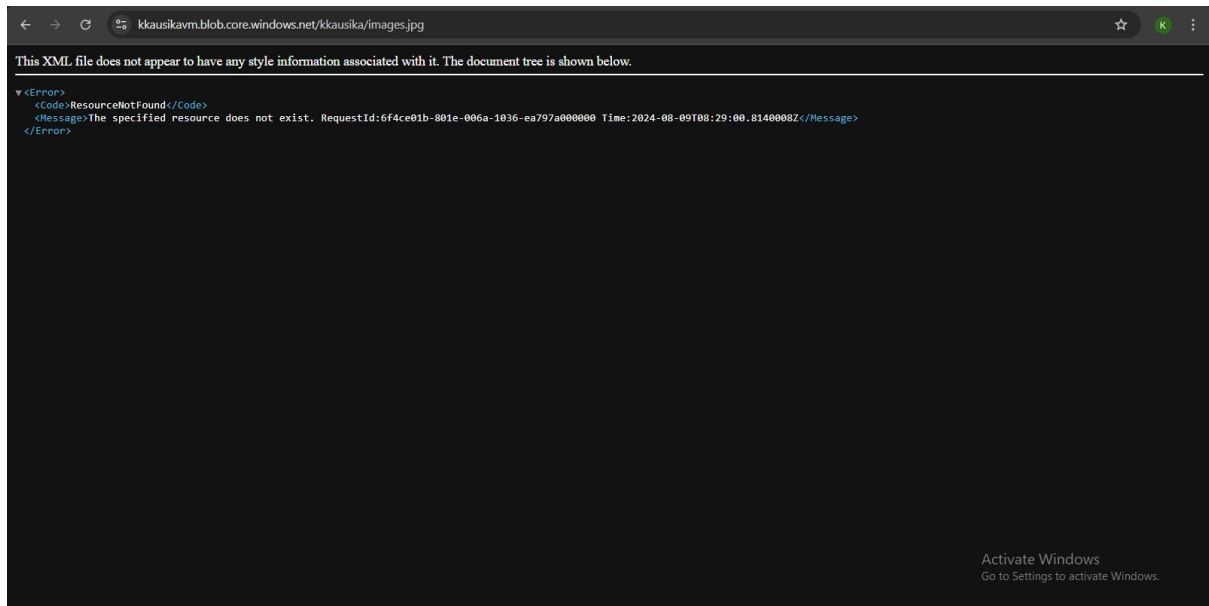
MANAGING OF STORAGE ACCOUNT

To Upload An Image Into A Container In An Azure Storage Account, Follow These Steps:

1. Access the Storage Account: Sign in to the Azure portal and navigate to your Storage Account.
2. Create a Container: In the Storage Account, select "Containers" and click "Add Container." Name the container and set the access level (private, blob, or container).
3. Open the Container: Once created, click on the container to open it.
4. Upload the Image: Click the "Upload" button within the container. In the upload window, browse your local machine to select the image file.
5. Configure Upload Settings: Optional - You can set advanced upload options like overwriting existing files, setting metadata, or assigning blob tier.
6. Start the Upload: Click "Upload" to start the process. Once the upload is complete, your image will be stored in the container and accessible based on the access level you set.



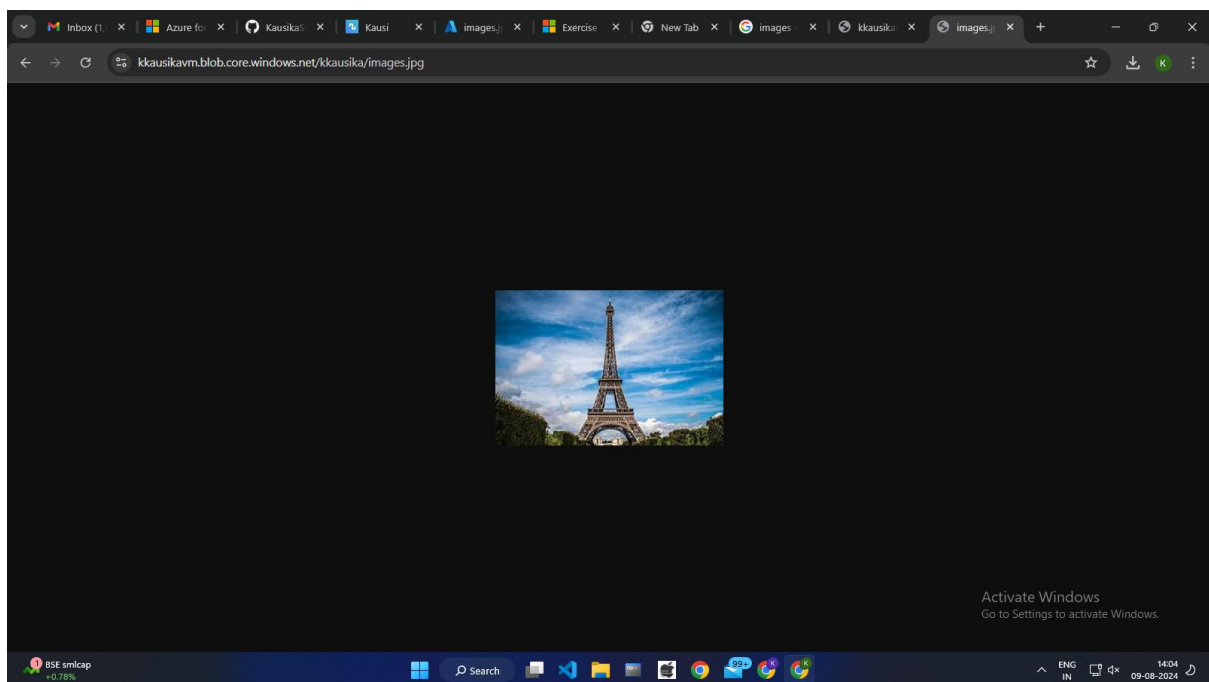
AFTER UPLOADED THE IMAGE :



URL PATH OF IMAGE :

<https://kkausikavm.blob.core.windows.net/kkausika/images.jpg>

OUTPUT :



STATIC WEB PAGE :

Deploying a Static Web Page on Azure

Using Azure Static Web App:

Prepare Your Site: Develop your static site and push it to a GitHub repository.

Set Up Azure Static Web Apps:

1. Sign in to [Azure Portal](#).
2. Click **Create a resource > Static Web Apps**.
3. Connect to your GitHub repo and branch.

Deploy and Access:

1. Azure deploys your site automatically.
2. Access it via the provided URL.

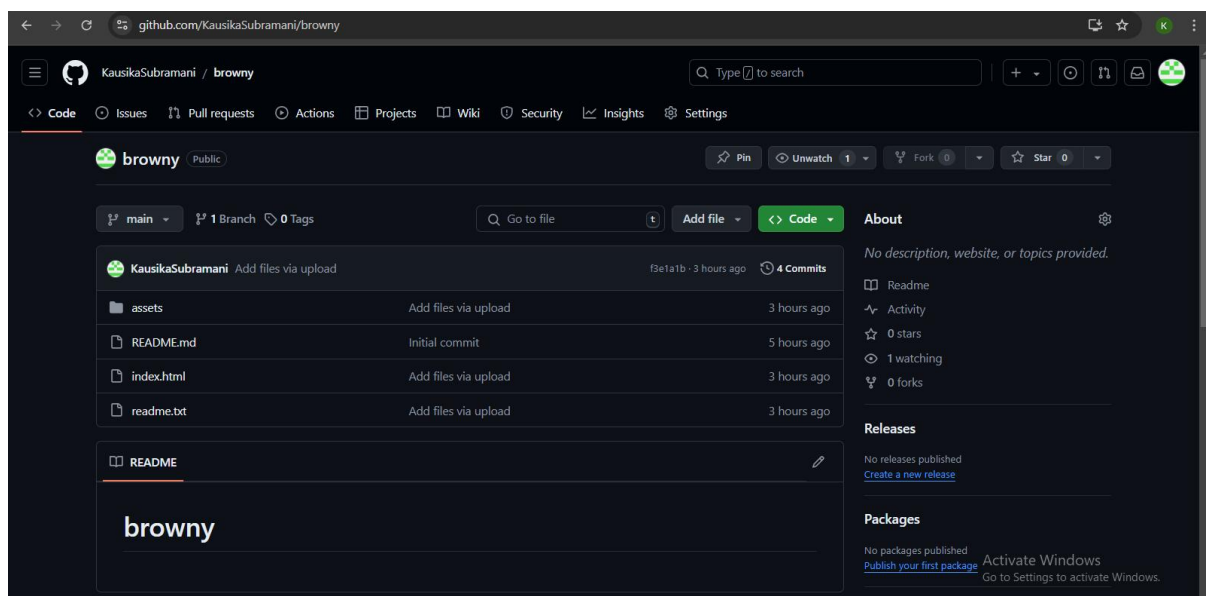
Access Your GitHub Pages Site :

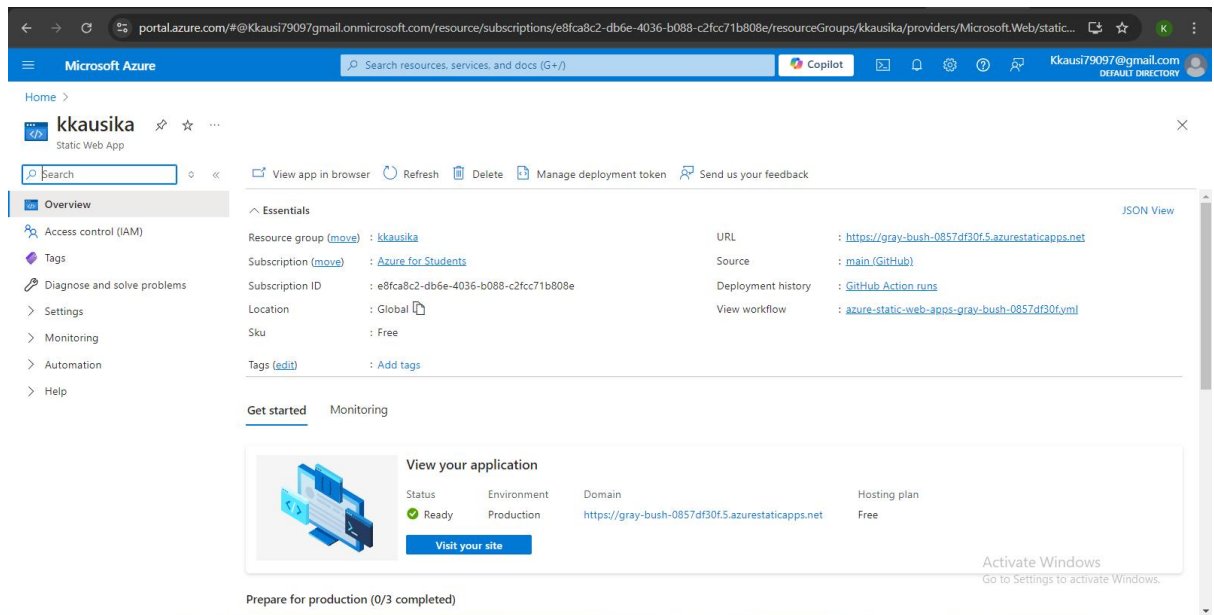
Visit Your Site:

Open a web browser and navigate to

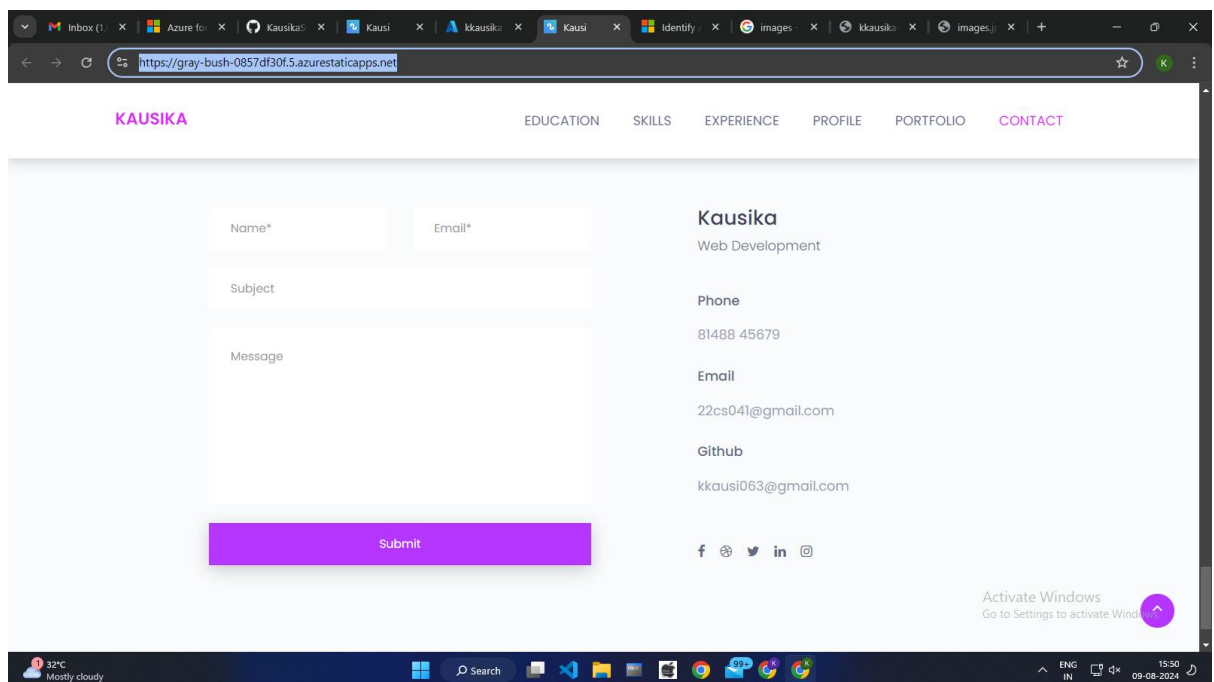
<https://github.com/KausikaSubramani/portfolio.git>

You should see your static web page displayed.





OUTPUT :

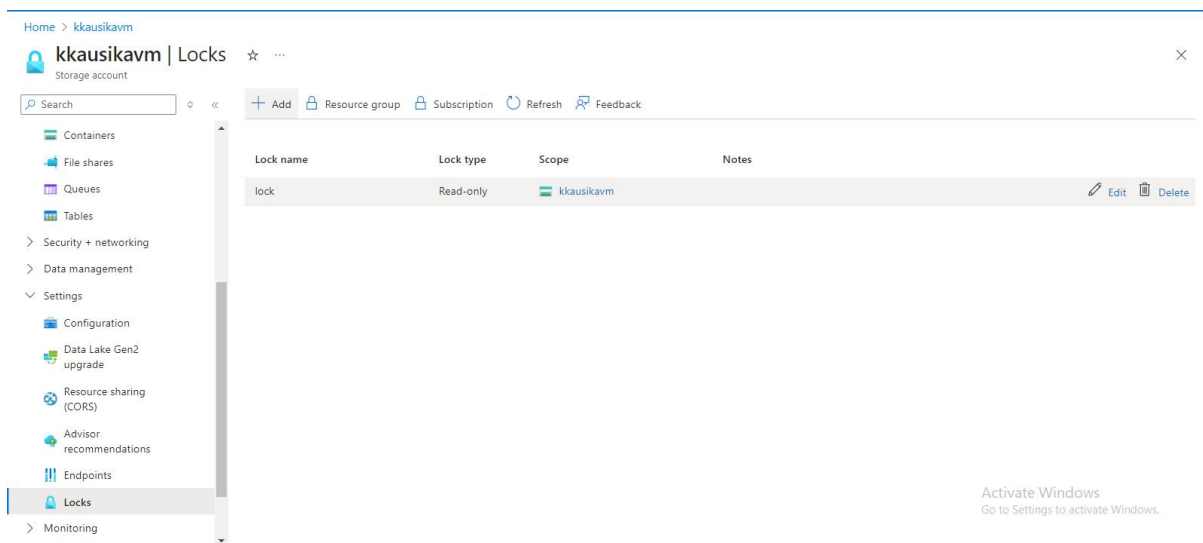


CREATION OF LOCK IN STORAGE ACCOUNT :

To create a lock on a storage account in Azure:

1. **Go to the Azure Portal:** Sign in at portal.azure.com.
2. **Find Your Storage Account:** Navigate to Storage accounts and select your account.
3. **Add a Lock:**
 1. Go to Settings > Locks.
 2. Click + Add, choose ReadOnly or Delete, name the lock, and click OK.

This prevents accidental deletion or modification of your storage account.



After creating a lock :

