

# Dr. N.G.P INSTITUTE OF TECHNOLOGY, COIMBATORE - 641048 AN AUTONOMOUS INSTITUTION



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Class : III Year CSE A

**Course Name**: Microsoft azure Fundamentals

**Company**: Pinesphere Solution, Coimbatore

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**Git Url**: https://github.com/DEEPTHIDS493/resume-portfolio.git

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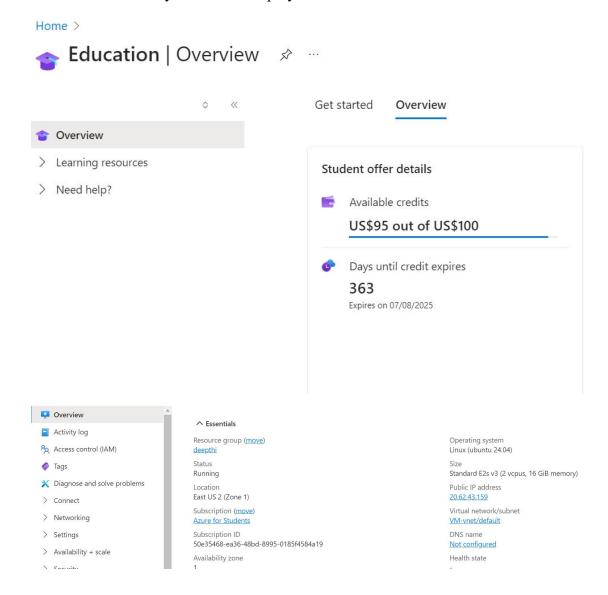
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#### CREATING A VIRTUAL MACHINE (VM) IN MICROSOFT AZURE:

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.



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

#### **COMMANDS**

Requesting a Cloud Shell.Succeeded.

Connecting terminal...

Welcome to Azure Cloud Shell

Type "az" to use Azure CLI

Type "help" to learn about Cloud Shell

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

deepthi [ ~ ]\$ ssh deepthi@20.62.43.159

The authenticity of host '20.62.43.159 (20.62.43.159)' can't be established.

ED25519 key fingerprint is

SHA256:VaW2mliUF15cX1uQhhvL5GtoTYK76DirfgDefuHUrDI.

This key is not known by any other names

Are you sure you want to continue connecting (yes/no/[fingerprint])? yes

Warning: Permanently added '20.62.43.159' (ED25519) to the list of known hosts.

deepthi@20.62.43.159'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 15:30:55 UTC 2024

System load: 0.08 Processes: 135

Usage of /: 5.8% of 28.02GB Users logged in: 0

Memory usage: 1% IPv4 address for eth0: 10.0.0.4

Swap usage: 0%

\* Strictly confined Kubernetes makes edge and IoT secure. Learn how MicroK8s just raised the bar for easy, resilient and secure K8s cluster deployment.

https://ubuntu.com/engage/secure-kubernetes-at-the-edge

Expanded Security Maintenance for Applications is not enabled.

13 updates can be applied immediately.

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 03:55:27 2024 from 20.235.219.140

deepthi@VM:~\$ 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

Hit:4 http://azure.archive.ubuntu.com/ubuntu noble-security InRelease

Get:5 http://azure.archive.ubuntu.com/ubuntu noble-updates/main amd64 c-n-f Metadata [5716 B]

Get:6 http://azure.archive.ubuntu.com/ubuntu noble-updates/universe amd64 c-n-f Metadata [12.7 kB]

Fetched 145 kB in 0s (319 kB/s)

Reading package lists... Done

Building dependency tree... Done

Reading state information... Done

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

deepthi@VM:~\$ sudo apt instal git

E: Invalid operation instal

deepthi@VM:~\$ 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 9 not upgraded.

deepthi@VM:~\$ 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 9 not upgraded.

deepthi@VM:~\$ sudo systemctl start nginx

deepthi@VM:~\$ 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

deepthi@VM:~\$ cd /var/www/html

deepthi@VM:/var/www/html\$ sudo rm -rf \*

deepthi@VM:/var/www/html\$ sudo git clone

https://github.com/DEEPTHIDS493/resume.git.

fatal: destination path '.' already exists and is not an empty directory.

deepthi@VM:/var/www/html\$ sudo git clone <a href="https://github.com/DEEPTHIDS493/resume-portfolio.git">https://github.com/DEEPTHIDS493/resume-portfolio.git</a>

Cloning into 'resume'...

remote: Enumerating objects: 90, done.

remote: Counting objects: 100% (90/90), done.

remote: Compressing objects: 100% (88/88), done.

remote: Total 90 (delta 4), reused 0 (delta 0), pack-reused 0

Receiving objects: 100% (90/90), 818.23 KiB | 8.43 MiB/s, done.

Resolving deltas: 100% (4/4), done.

deepthi@VM:/var/www/html\$ sudo chown -R www-data:www-data/var/www/html

deepthi@VM:/var/www/html\$

#### **OUTPUT:**







#### CREATION OF STORAGE ACCOUNT IN MICROSOFT

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

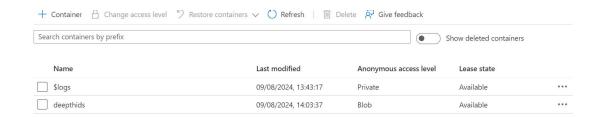
- 1. Sign in to Azure Portal.
- 2. Create a Resourc
- 3. Configure the Basics
- 4. Set Advanced Options
- 5. Review and Create
- 6. Access the Storage Account
- 7. After deployment, access the storage account to manage containers, blobs, files, tables, or queues.



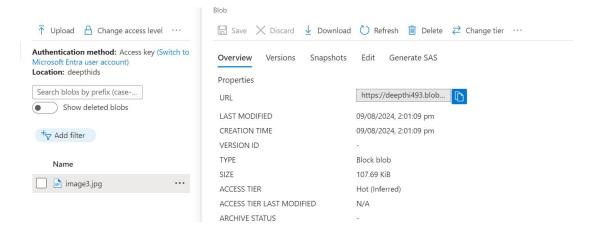
#### **MANAGING OF STORAGE ACCOUNT:**

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.



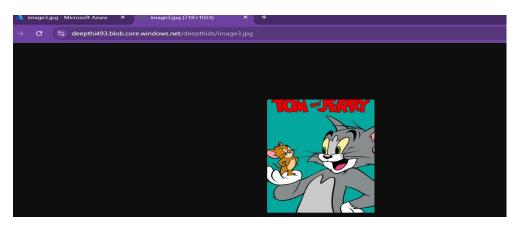
#### **AFTER UPLOADED THE IMAGE:**



#### **URL PATH OF IMAGE:**

https://deepthi493.blob.core.windows.net/deepthids/image3.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.

Resource group (move)

deepthi

Subscription (move)

Azure for Students

Subscription ID

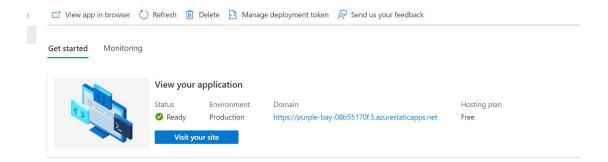
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#### Access Your GitHub Pages Site:

#### **Visit Your Site:**

Free

Open a web browser and navigate to <a href="https://github.com/DEEPTHIDS493/resume.git">https://github.com/DEEPTHIDS493/resume.git</a> 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:

