



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



Reg No : 710722104034

Name : HEMA VARSHITHA S

Class : III Year CSE A

Start Date : 06.08.2024

End Date : 10.08.2024

Git URL : <https://github.com/Hemasakthikumar/website.git>

Course Name : Microsoft azure Fundamentals

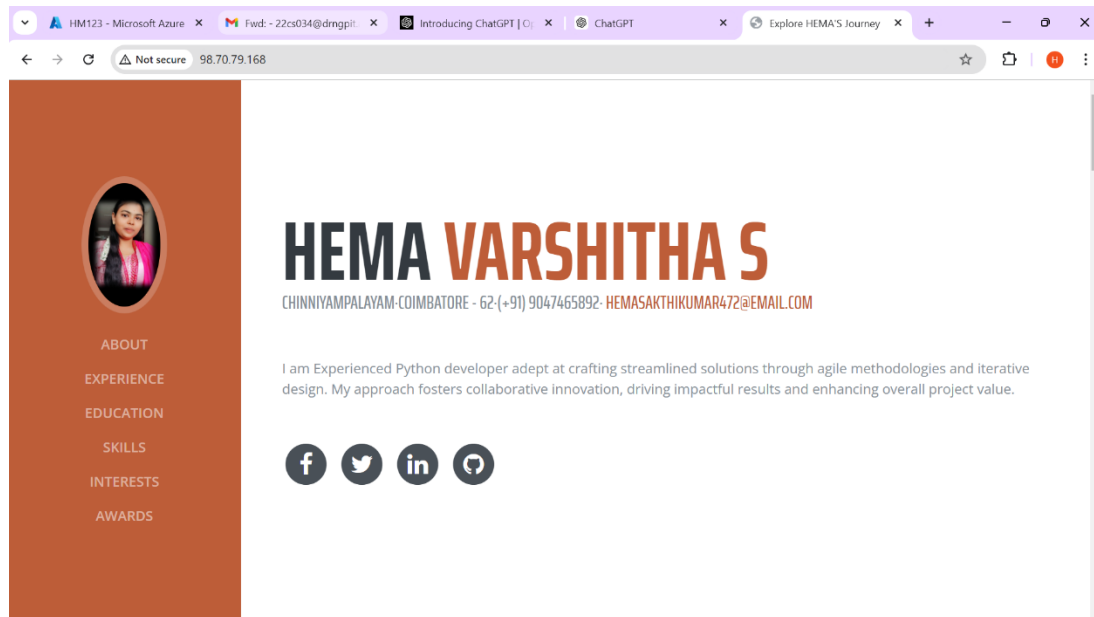
Company : Pinesphere Solution,Coimbatore

TABLE OF CONTENT

S NO	TABLE	PAGE NO
1	Website creation	3
2	Microsoft account creation	3
3	GIT hub creation codePush	4
4	Microsoft module completion	5
5	Creation of Virtual Machine	6
6	Host a website from github on a vm	8
7	Creation of storage account	14
8	Static web page	17
9	Storage account lock	18

WEBSITE CREATION:

This project is a personal profile website developed using HTML, CSS, SCSS, and JavaScript. It features a responsive design, ensuring optimal viewing on all devices, and includes interactive elements like smooth scrolling and form validation. The SCSS is structured with variables for maintainability, while JavaScript enhances user experience with dynamic content. The website is cross-browser compatible, modular, and ready for deployment on any web hosting platform



MICROSOFT ACCOUNT CREATION:

A Microsoft account is your gateway to accessing a variety of Microsoft services, including Outlook, OneDrive, Office Online, and more. By creating a Microsoft account, you gain a single sign-in that connects you to these services seamlessly, whether you're managing emails, storing files in the cloud, or collaborating on documents. Your account also allows you to personalize your Windows experience, sync settings across devices, and access your favorite apps and games through the Microsoft Store. Security is a priority, with features like multi-factor authentication and account recovery options to keep your information safe. With a Microsoft account, you can easily manage your digital life across all your devices, ensuring that everything you need is just a click away.

<

GIT HUB CREATION:

A GitHub account lets you host and manage code repositories, collaborate with developers, and contribute to open-source projects. It offers version control, project management tools, and the ability to showcase your work to the global developer community. GitHub also allows you to explore and contribute to millions of projects, enhancing your skills and visibility. With features like private repositories and GitHub Pages, it's an essential tool for any developer. This Is my Repository named Profile and my GIT-URL <https://github.com/Hemasakthikumar/website.git>.



Sign in to GitHub

Username or email address

Password

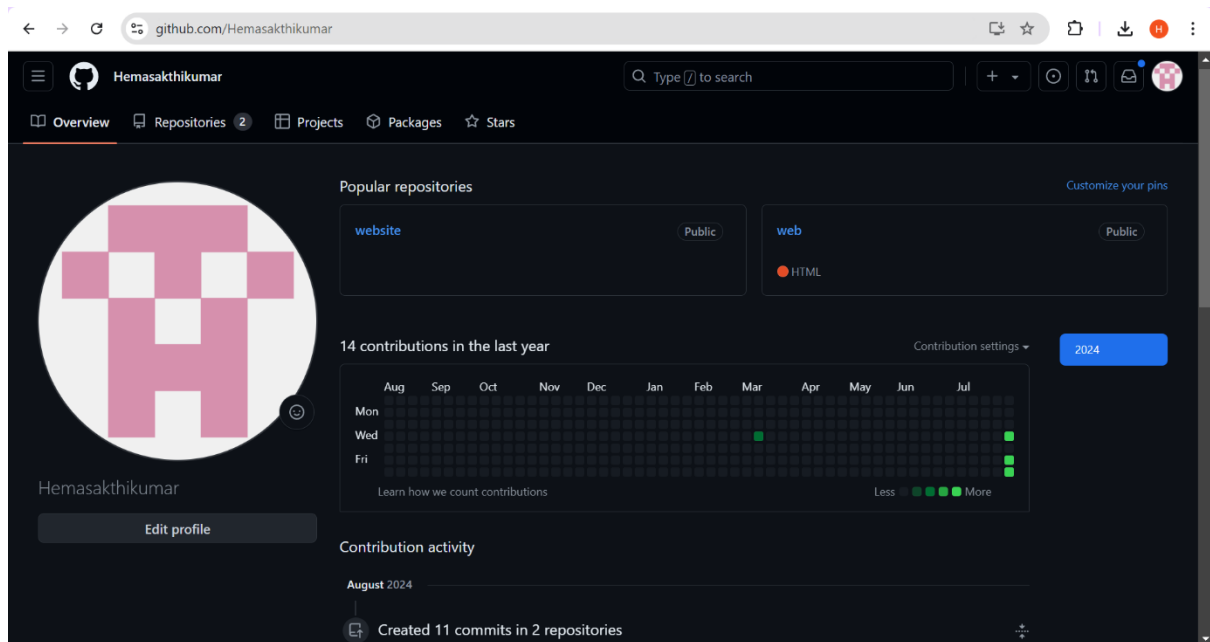
[Forgot password?](#)

Sign in

[Sign in with a passkey](#)

[New to GitHub? Create an account](#)

[Terms](#) [Privacy](#) [Docs](#) [Contact GitHub Support](#) [Manage cookies](#) [Do not share my personal information](#)



MICROSOFT MODULE COMPLETION:

Having completed the Microsoft Azure Fundamentals modules, you now understand core cloud concepts and service types, including IaaS, PaaS, and SaaS. You've explored cloud computing's benefits, such as flexibility and scalability. In Azure, you learned about compute services like virtual machines and serverless functions, and networking services such as Virtual Networks and Load Balancer. This knowledge provides a strong foundation for leveraging Azure's capabilities in cloud-based solutions.

Modules are :

- Microsoft Azure Fundamentals: Describe cloud concepts
- Describe cloud service types
- Describe cloud computing
- Describe Azure compute and networking services

Keep up the great work!



Microsoft Azure Fundamentals:
Describe cloud concepts



Describe cloud service types

You have earned 2 achievements!

Congratulations, but what should you do next?

Keep up the great work!



Describe Azure storage
services

You have earned an achievement!

Congratulations, but what should you do next?

First, let's share your achievement

You put in the time to learn something new, let your network share in your victory!



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 Microsoft Azure Education Overview page. The top navigation bar includes the Microsoft Azure logo, a search bar, and the user profile 'hemasakthikumar472@...'. The left sidebar shows the 'Education | Overview' section with links for 'Overview', 'Learning resources', and 'Need help?'. The main content area is titled 'Overview' and includes a 'Get started' tab. The 'Student offer details' section shows 'Available credits' of '\$94 out of \$100' and 'Days until credit expires' of '362' (expires on 08/07/2025). The 'Popular solutions' section lists four options: 'Deploy a Docker container', 'Create your first Node.js app', 'Create and train a Machine Learning model', and 'Build and deploy your first website'. There are also links for 'View cost details', 'Explore all', 'Free Services', and 'Free software'.

The screenshot shows the Microsoft Azure VM Overview page for a virtual machine named 'HM123'. The top navigation bar includes the Microsoft Azure logo, a search bar, and the user profile 'hemasakthikumar472@...'. The left sidebar shows the 'Overview' section with links for 'Activity log', 'Access control (IAM)', 'Tags', 'Diagnose and solve problems', 'Connect', 'Networking', 'Settings', 'Availability + scale', 'Security', 'Backup + disaster recovery', 'Operations', 'Monitoring', and 'Automation'. The main content area is titled 'Overview' and includes a 'Search' bar and a 'Connect' button. The 'Essentials' section lists key details: Resource group (HM098), Status (Running), Location (Central India (Zone 1)), Subscription (Azure for Students), Subscription ID (9d7732fa-5ad5-4c11-9513-ef5ba9f809ce), Availability zone (1), Operating system (Linux (ubuntu 24.04)), Size (Standard E2s v3 (2 vcpus, 16 GiB memory)), Public IP address (98.70.79.168), Virtual network/subnet (HM123-vnet/default), DNS name (Not configured), Health state (-), and Time created (8/9/2024, 5:21 AM UTC). There are also links for 'Tags (edit)', 'Add tags', and 'JSON View'. The bottom navigation bar includes links for 'Properties', 'Monitoring', 'Capabilities (7)', 'Recommendations', and 'Tutorials'.

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

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.

hemavarshitha [~]\$ ssh hema@98.70.79.168

hema@98.70.79.168'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 05:48:52 UTC 2024

System load: 0.0 Processes: 138

Usage of /: 5.7% of 28.02GB Users logged in: 1

Memory usage: 2% IPv4 address for eth0: 10.1.0.4

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 05:35:38 2024 from 4.188.107.221

`hema@HM123:~$ sudo apt update`

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

Hit:2 <http://azure.archive.ubuntu.com/ubuntu> noble-updates InRelease

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

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

Reading package lists... Done

Building dependency tree... Done

Reading state information... Done

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

`hema@HM123:~$ 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 7 not upgraded.

```
hema@HM123:~$ 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 7 not upgraded.

```
hema@HM123:~$ sudo systemctl start nginx
```

```
hema@HM123:~$ 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

```
hema@HM123:~$ cd /var/www/html
```

```
hema@HM123:/var/www/html$ sudo rm -rf *
```

```
hema@HM123:/var/www/html$ sudo git clone https://github.com/Hemasakthikumar/web.git .
```

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

```
hema@HM123:/var/www/html$ sudo git clone
```

```
https://github.com/Hemasakthikumar/web.git /var/www/html/web
```

Cloning into 'web'...

remote: Not Found

fatal: repository 'https://github.com/Hemasakthikumar/web.git/var/www/html/web/' not found

```
hema@HM123:/var/www/html$ sudo git clone https://github.com/Hemasakthikumar/web.git
```

```
/var/www/html/web
```

Cloning into '/var/www/html/web'...

Docs: man:nginx(8)

Main PID: 2366 (nginx)

Tasks: 3 (limit: 19121)

Memory: 2.5M (peak: 3.0M)

CPU: 27ms

CGroup: /system.slice/nginx.service

└─2366 "nginx: master process /usr/sbin/nginx -g daemon on; master_process on;"

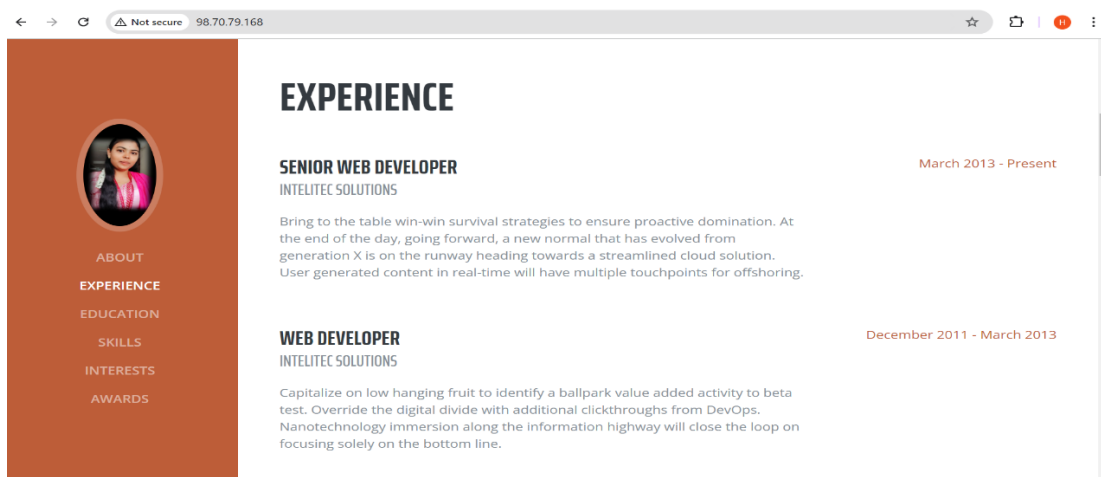
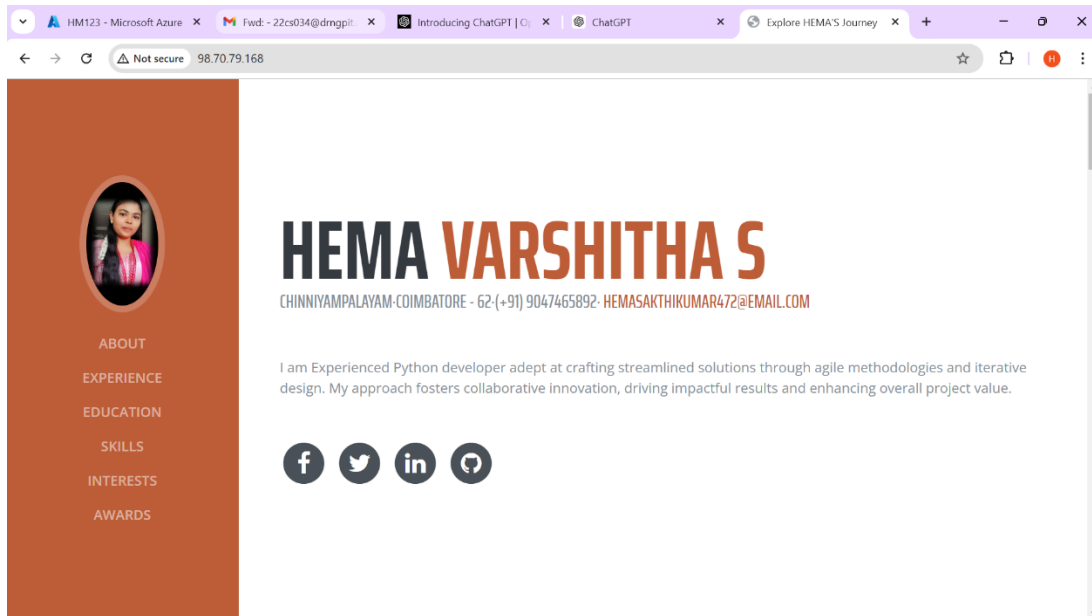
└─2367 "nginx: worker process"


└─2368 "nginx: worker process"

Aug 09 05:26:16 HM123 systemd[1]: Starting nginx.service - A high performance web server and a reverse proxy server...

Aug 09 05:26:16 HM123 systemd[1]: Started nginx.service - A high performance web server and a reverse proxy server.

OUTPUT:





- ABOUT
- EXPERIENCE
- EDUCATION
- SKILLS
- INTERESTS
- AWARDS

Dynamically procrastinate B2C users after installed base benefits. Dramatically visualize customer directed convergence without revolutionary ROI.

EDUCATION

DR N.G.P INSTITUTE OF TECHNOLOGY
 BACHELOR OF ENGINEERING


August 2022 - May 2026

Computer Science - Web Development Track
GPA: 8.44

P S G HIGHER SECONDARY SCHOOL
 BACHELOR OF SCIENCE

August 2020 - May 2022












GPA: 8.0



- ABOUT
- EXPERIENCE
- EDUCATION
- SKILLS
- INTERESTS
- AWARDS


SKILLS

PROGRAMMING LANGUAGES & TOOLS

WORKFLOW

- ✓ Mobile-First, Responsive Design
- ✓ Cross Browser Testing & Debugging
- ✓ Cross Functional Teams
- ✓ Agile Development & Scrum

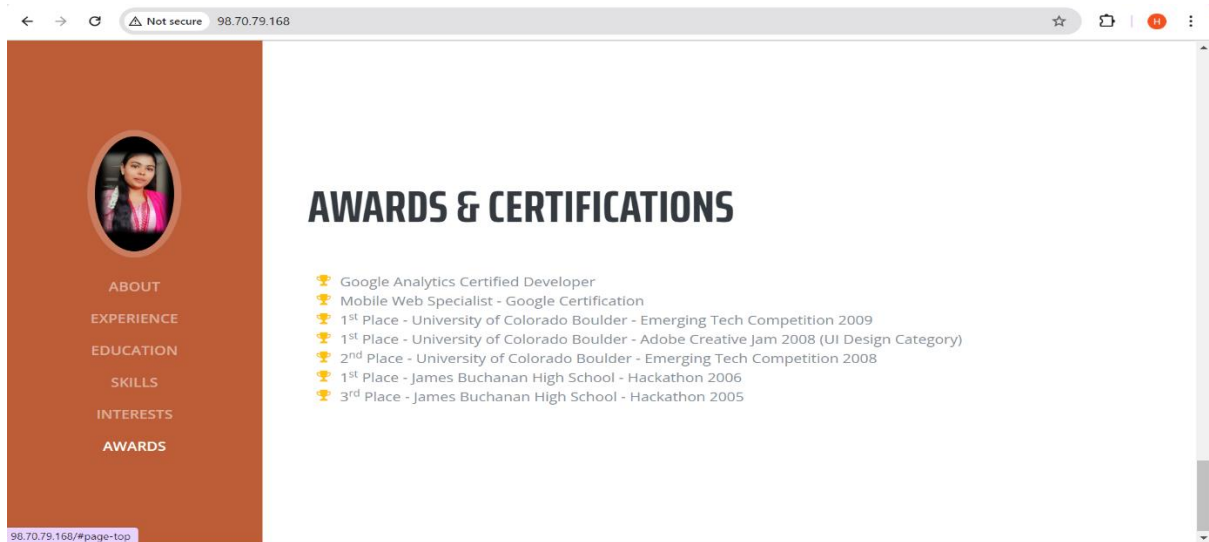


- ABOUT
- EXPERIENCE
- EDUCATION
- SKILLS
- INTERESTS
- AWARDS

INTERESTS

Apart from being a web developer, I enjoy most of my time being outdoors. In the winter, I am an avid skier and novice ice climber. During the warmer months here in Colorado, I enjoy mountain biking, free climbing, and kayaking.

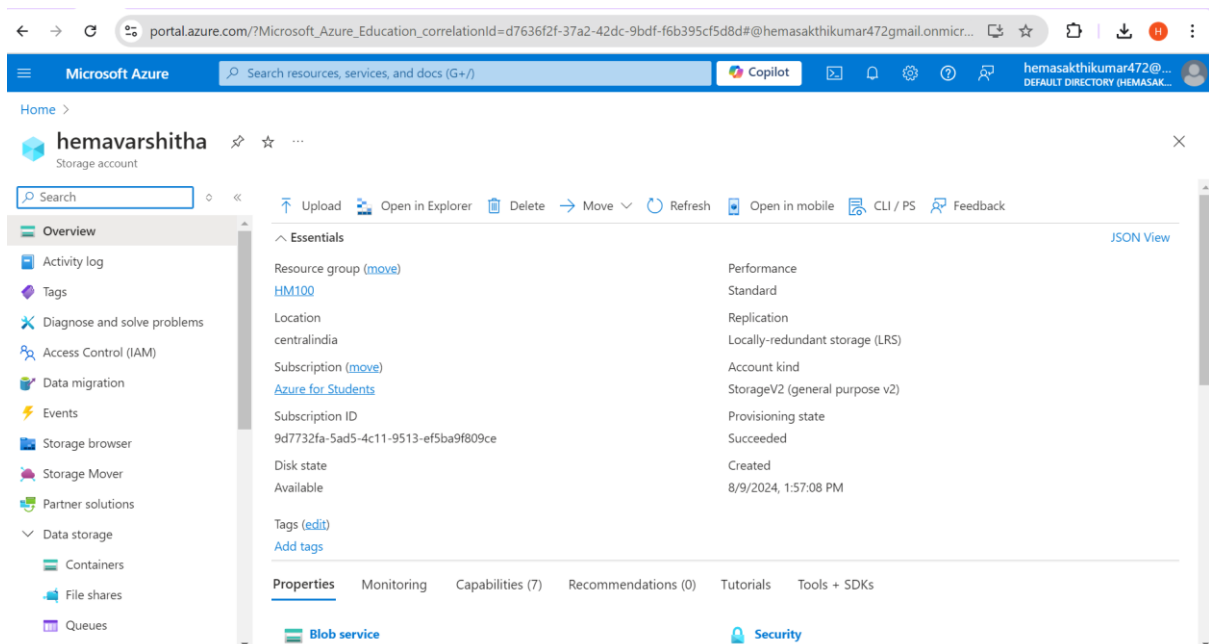
When forced indoors, I follow a number of sci-fi and fantasy genre movies and television shows, I am an aspiring chef, and I spend a large amount of my free time exploring the latest technology advancements in the front-end web development world.



CREATION OF STORAGE ACCOUNT IN MICROSOFT:

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

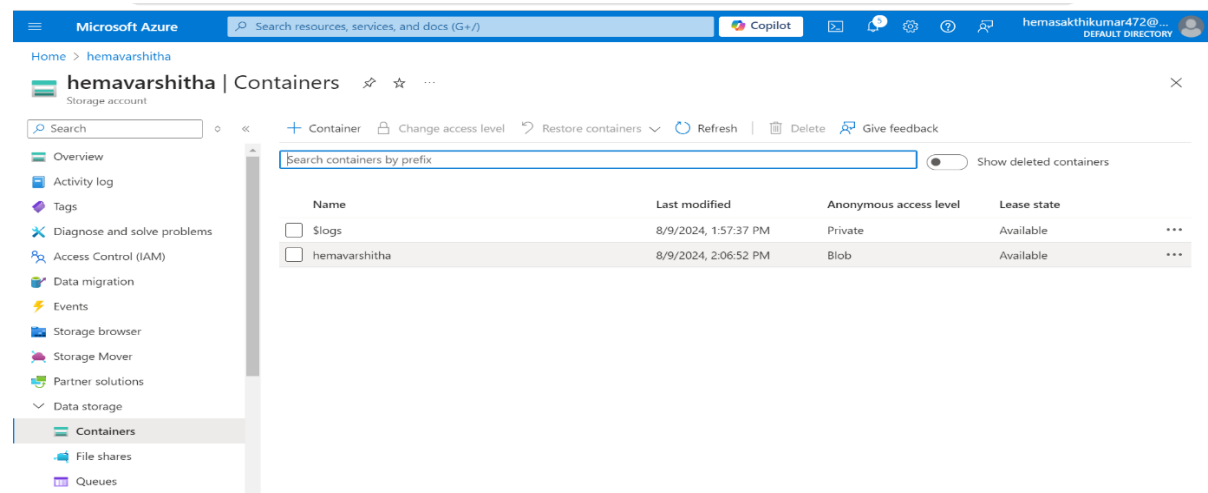
1. Sign in to Azure Portal.
2. Create a Resource
3. Configure the Basics
4. Set Advanced Options
5. Review and Create
6. Access the Storage Account
7. After deployment, access the storage account to manage containers, blobs, files, tables, or queues.



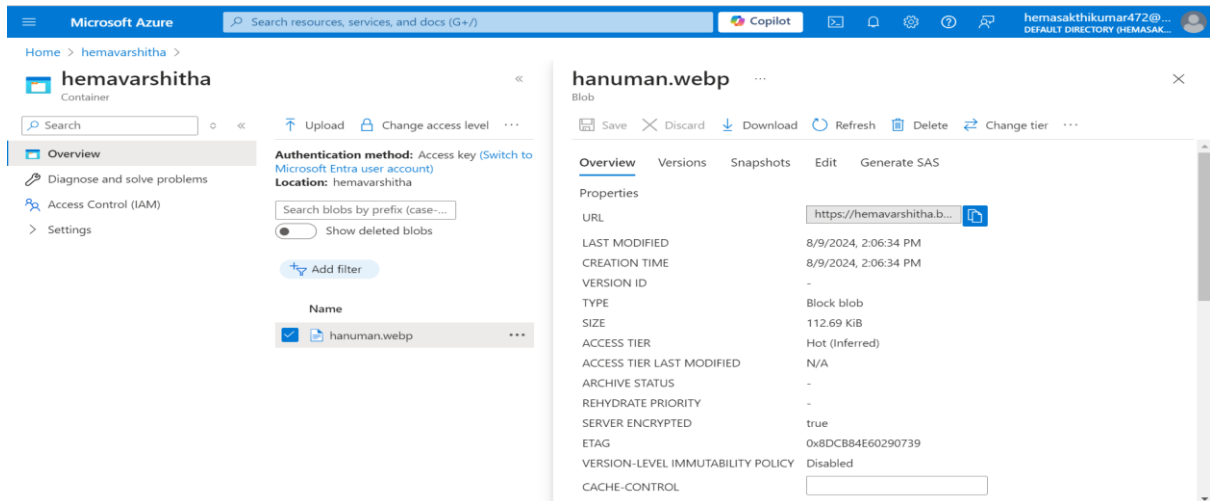
MANAGING OF STORAGE ACCOUNT

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.



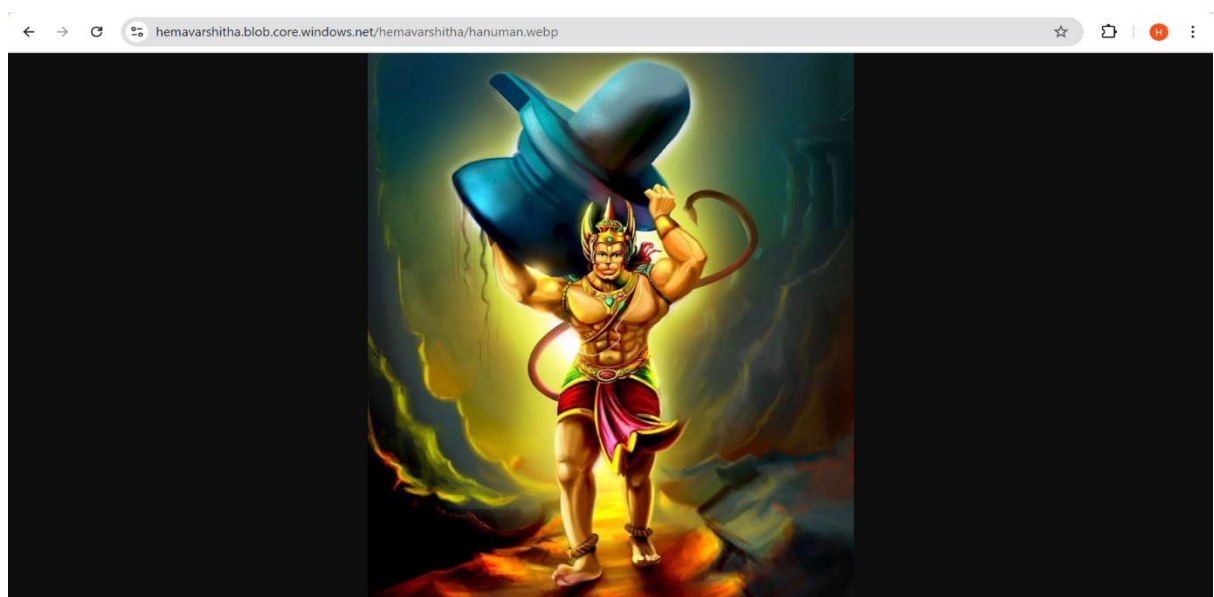
AFTER UPLOADED THE IMAGE :



URL PATH OF IMAGE :

<https://hemavarshitha.blob.core.windows.net/hemavarshitha/hanuman.webp>

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.

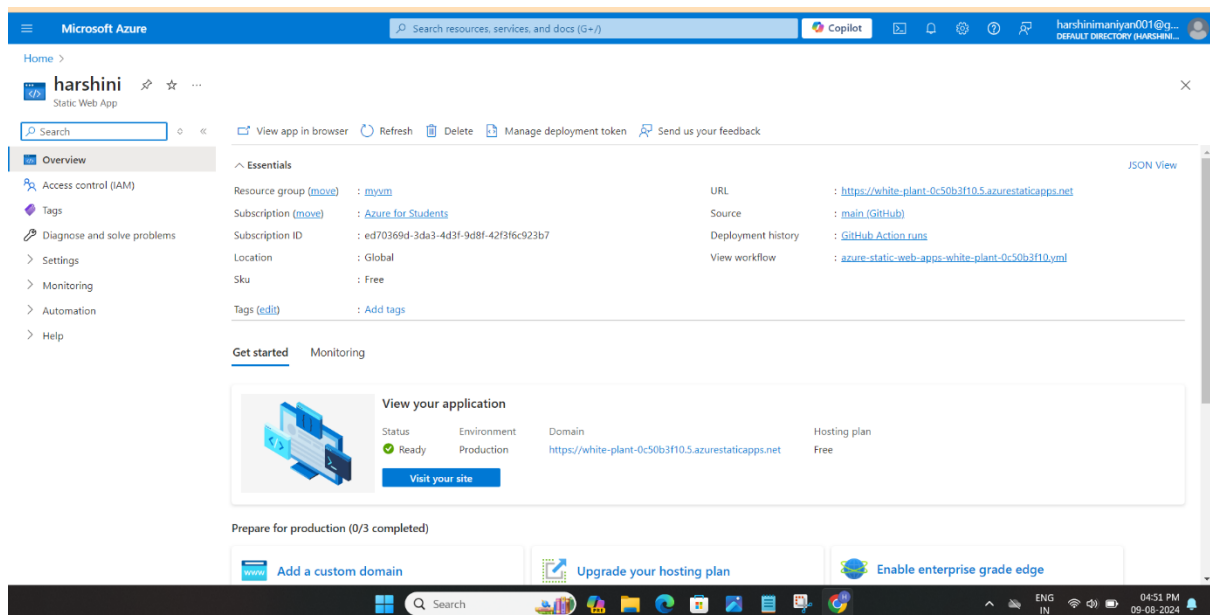
Set Up Azure Static Web Apps:

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.

(<https://white-plant-0c50b3f10.5.azurestaticapps.net>)

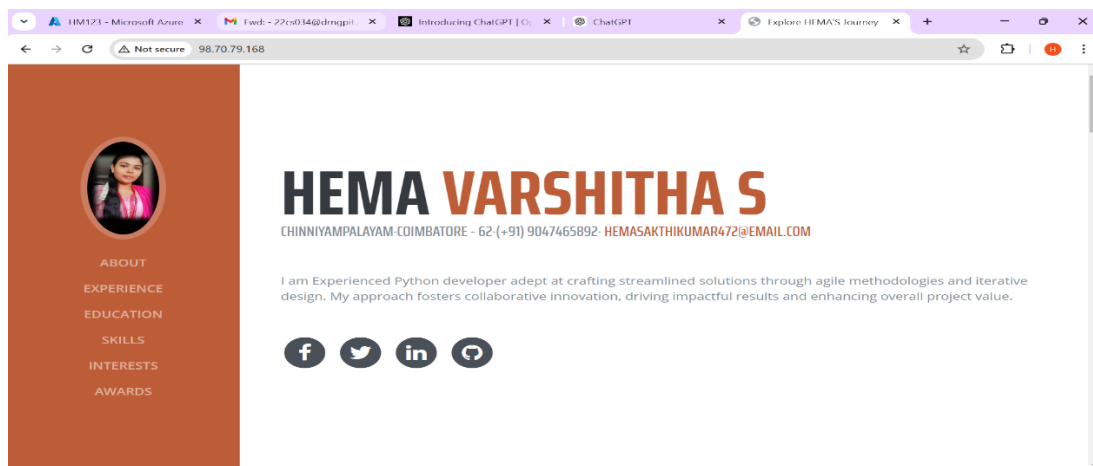


Access Your GitHub Pages Site :

Visit Your Site:

Open a web browser and navigate to <https://github.com/Hemasakthikumar/website.git>. You should see your static web page displayed.

OUTPUT:



STORAGE ACCOUNT LOCK :

A storage account lock for containers has been created to enhance data security and prevent accidental deletion or modifications. This lock ensures that all containers within the storage account are protected, providing an additional layer of control. With this feature, only authorized users can make changes, reducing the risk of data loss. It's a crucial step in maintaining the integrity and reliability of the storage account in Microsoft Azure.

Microsoft Azure

Search resources, services, and docs (G+/I)

Copilot

hemasakthikumar472@...
DEFAULT DIRECTORY (HEMASAK...)

Home > hemavarshitha

hemavarshitha | Locks ☆ ...

Storage account

Search

+ Add

Resource group

Subscription

Refresh

Feedback

Storage Mover

Partner solutions

Data storage

Containers

File shares

Queues

Tables

Security + networking

Data management

Settings

Configuration

Data Lake Gen2 upgrade

Resource sharing (CORS)

Lock name	Lock type	Scope	Notes
storagelock	Read-only	hemavarshitha	<div>Edit Delete</div>

OUTPUT:

portal.azure.com/#view/Microsoft_Azure_Storage/ContainerMenuBlade/~/overview/storageAccountId/%2Fsubscriptions%2F9d7732fa-5ad5...

Microsoft Azure

Search resources, services, and docs (G+/I)

Copilot

hemasakthikumar472@...
DEFAULT DIRECTORY (HEMASAK...)

Home >

hemavarshitha ...

Container

Search

Upload

Change access level

Refresh

Delete

Change tier

Acquire lease

Break lease

View snapshots

Overview

Diagnose and solve problems

Access Control (IAM)

Settings

✖

You do not have permissions to use the access key to list data. Click to learn more about authenticating with Azure Storage.
 The scope '/subscriptions/9d7732fa-5ad5-4c11-9513-ef5ba9f809ce/resourceGroups/HM100/providers/Microsoft.Storage/storageAccounts/hemavarshitha' cannot perform write operation because following scope(s) are locked: '/subscriptions/9d7732fa-5ad5-4c11-9513-ef5ba9f809ce/resourceGroups/HM100/providers/Microsoft.Storage/storageAccounts/hemavarshitha'. Please remove the lock and try again.

Authentication method: Access key (Switch to Microsoft Entra user account)

Location:

Search blobs by prefix (case-sensitive)

Show deleted blobs

Add filter

Name	Modified	Access tier	Archive status	Blob type	Size
No results					

<https://portal.azure.com/#>