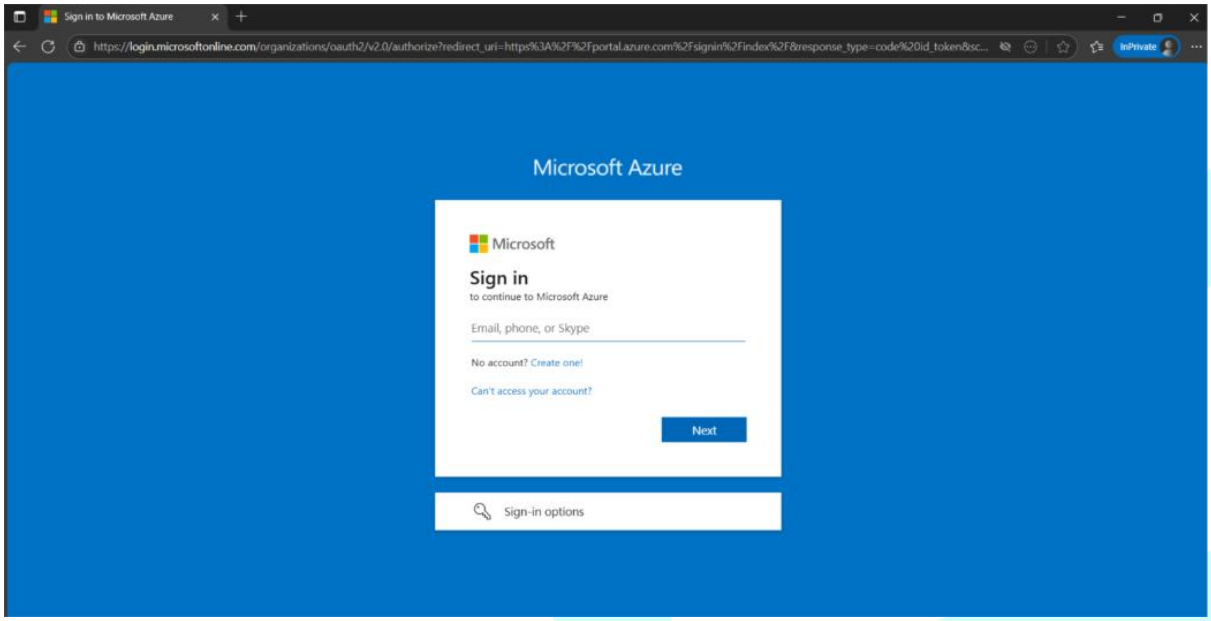
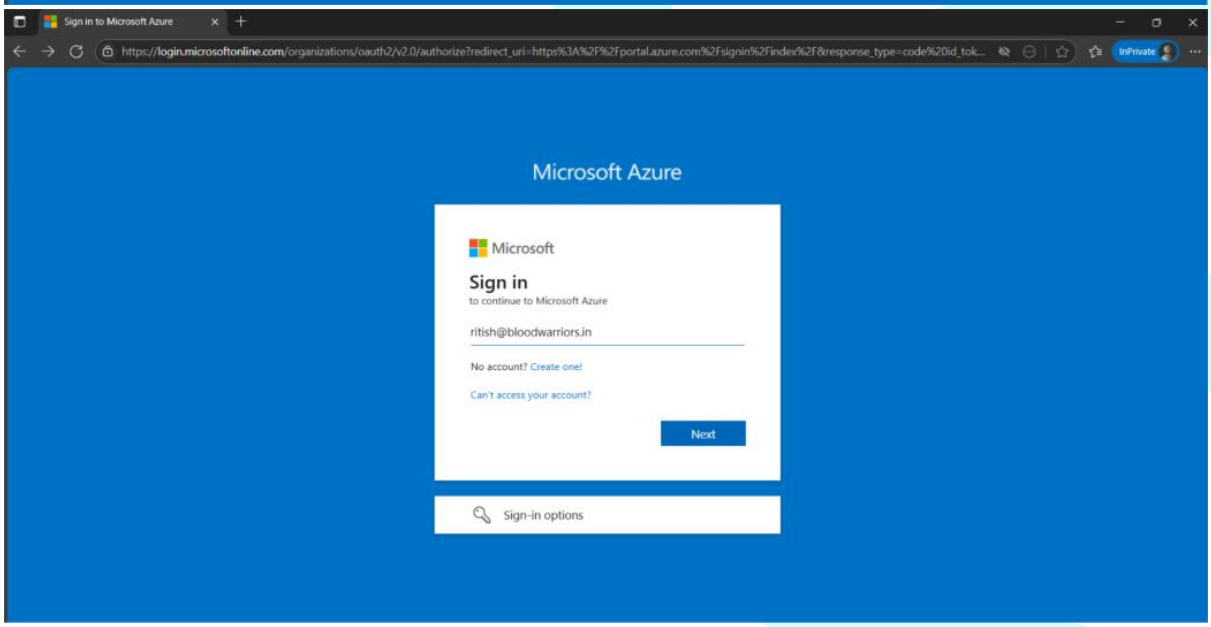
Azure Account Setup

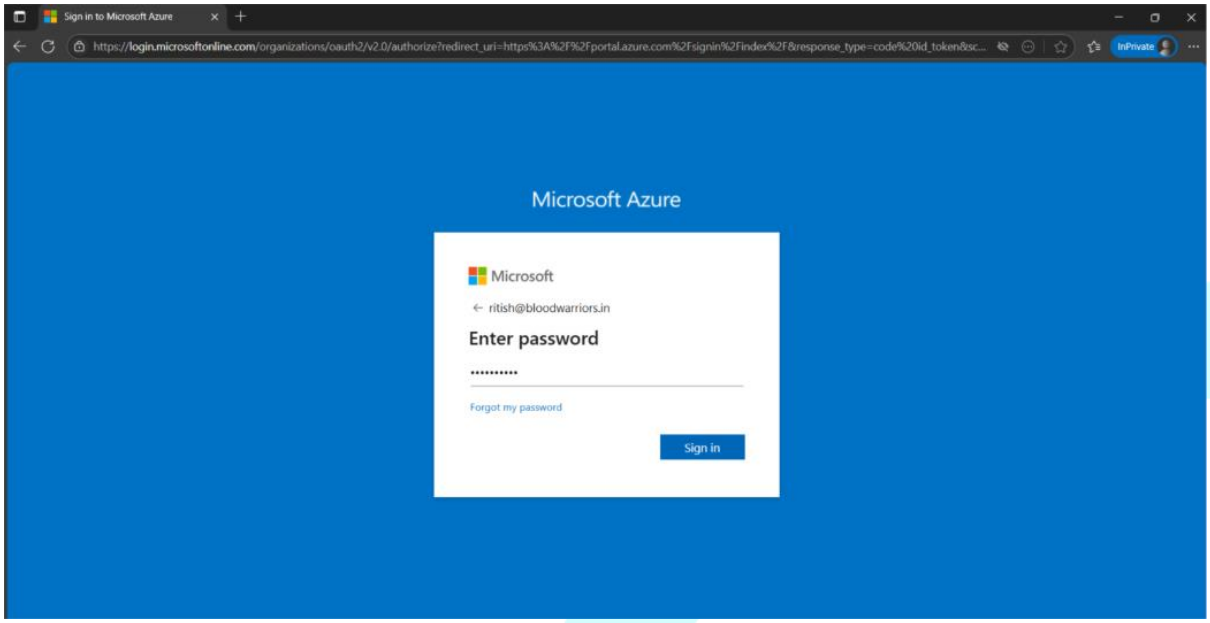
Step 1: Type or Use: portal.azure.com

1.a) Enter Your Mail ID and Click Next.

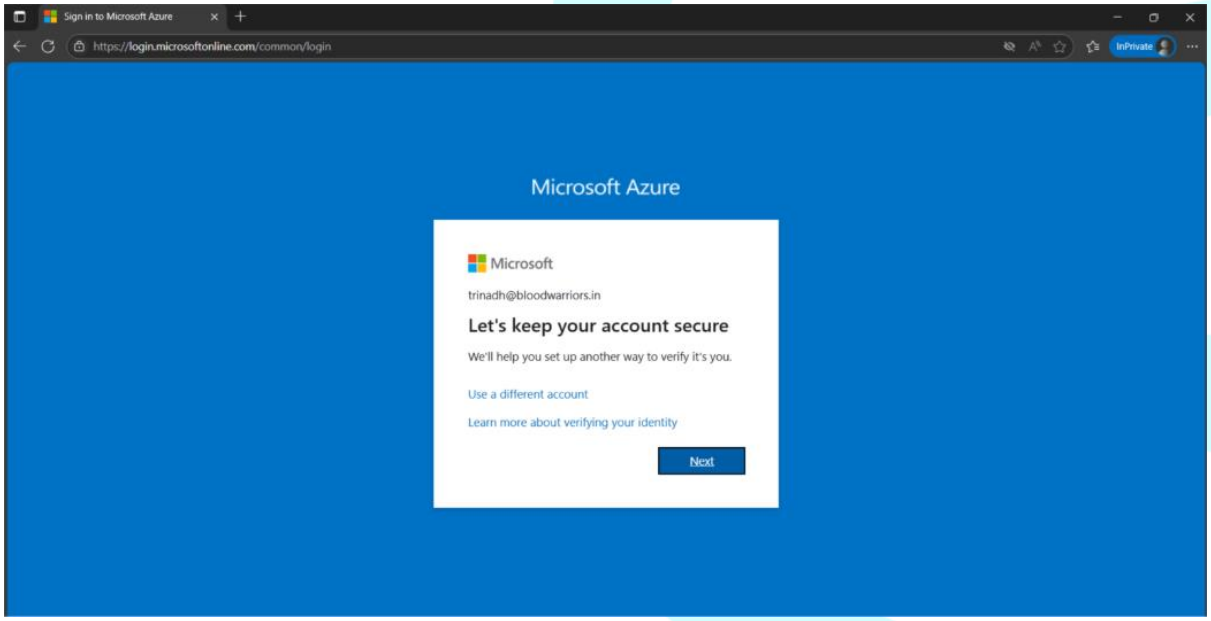




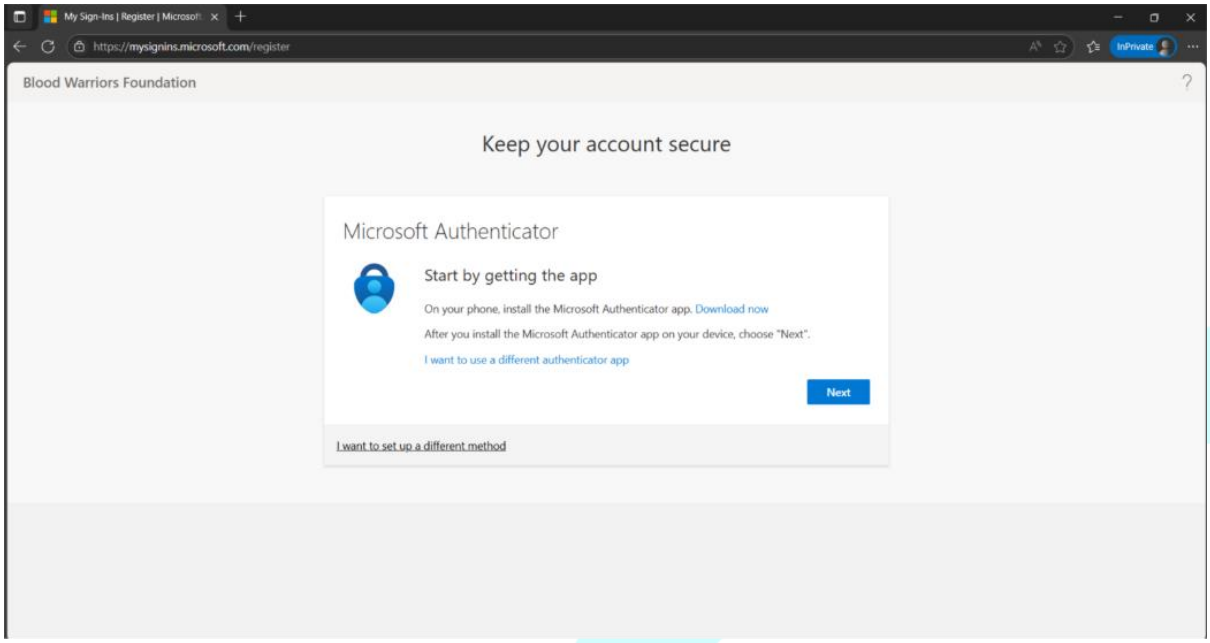
1.b) Enter Password and Click Next.



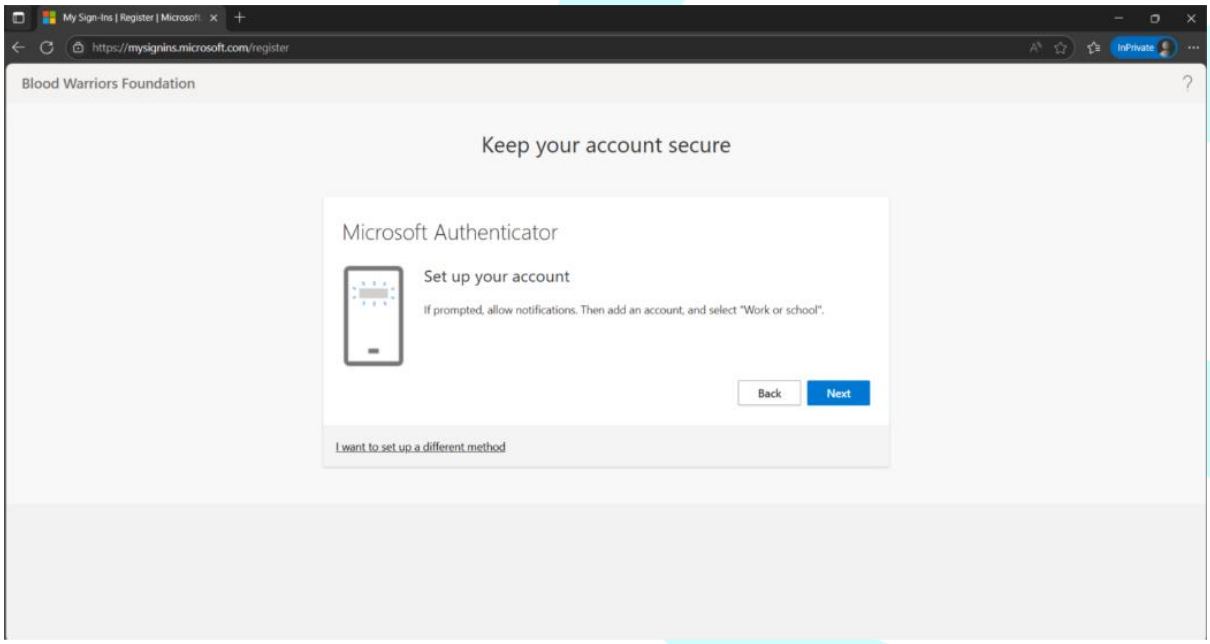
2. Authenticator Setup:



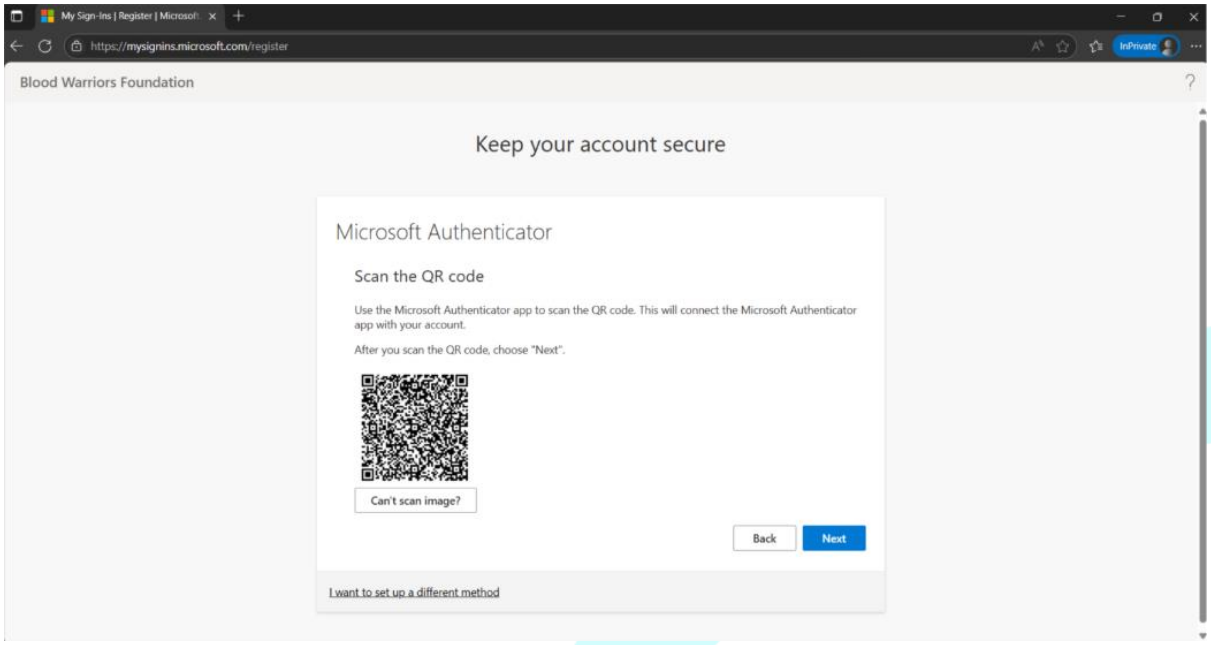
Click on next



Click on next

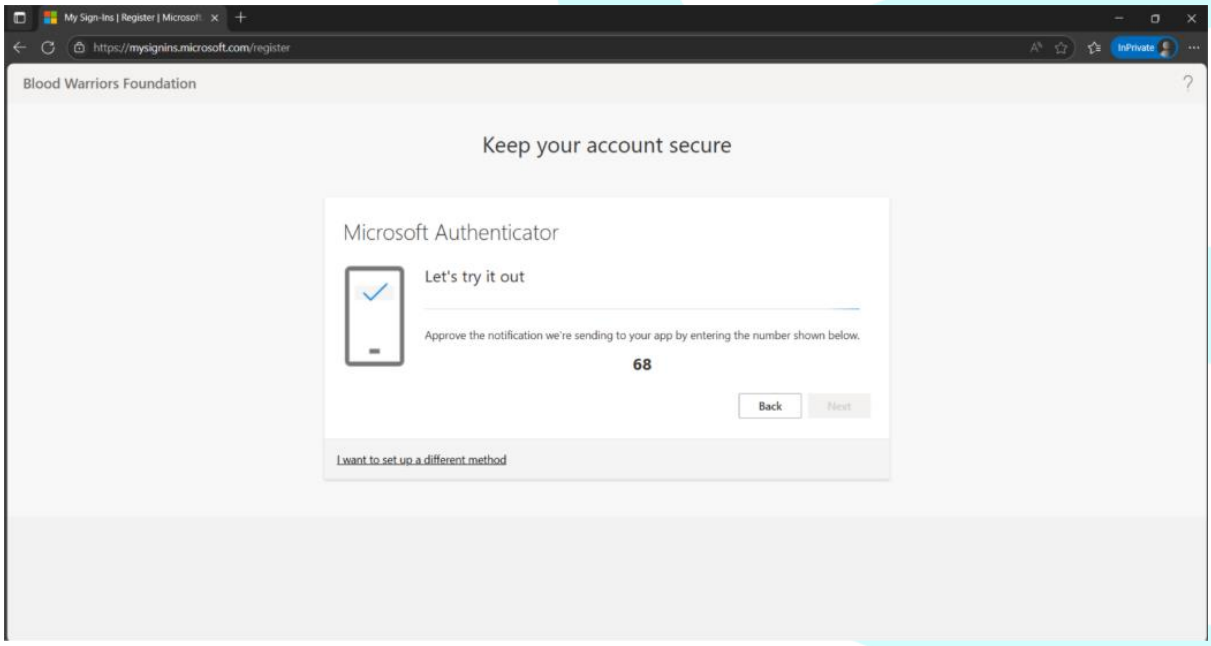


Click on next

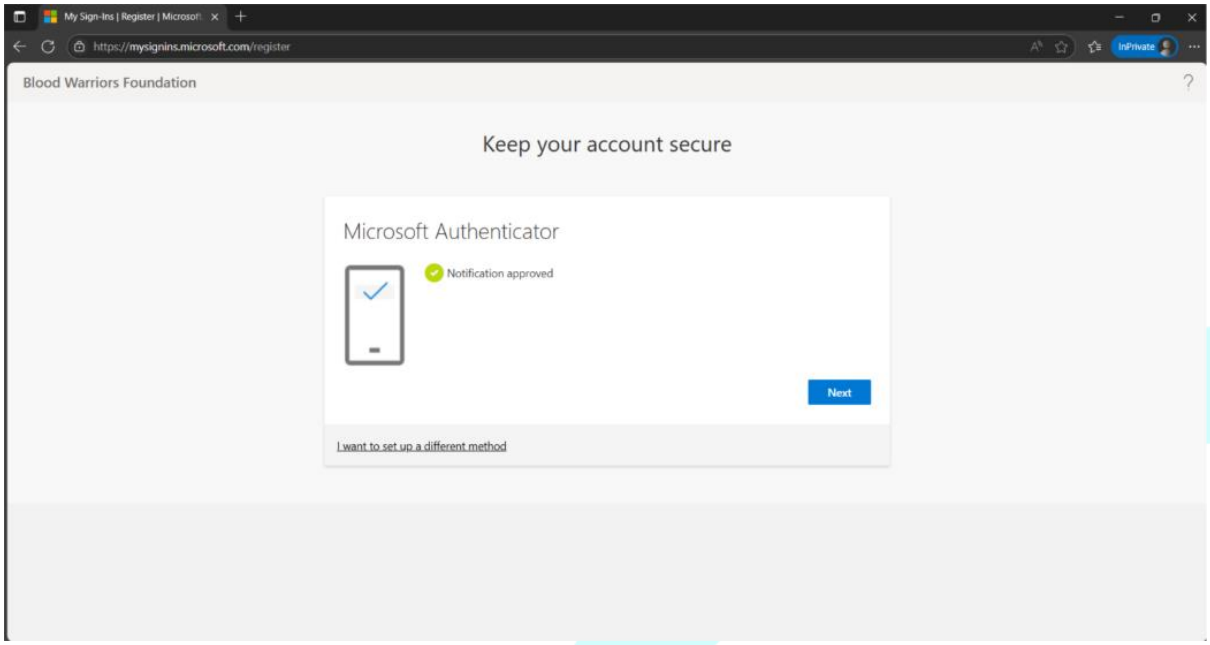


Now Your Need to Install Microsoft Authenticator App on your Mobile Phone and Scan this QR Code.

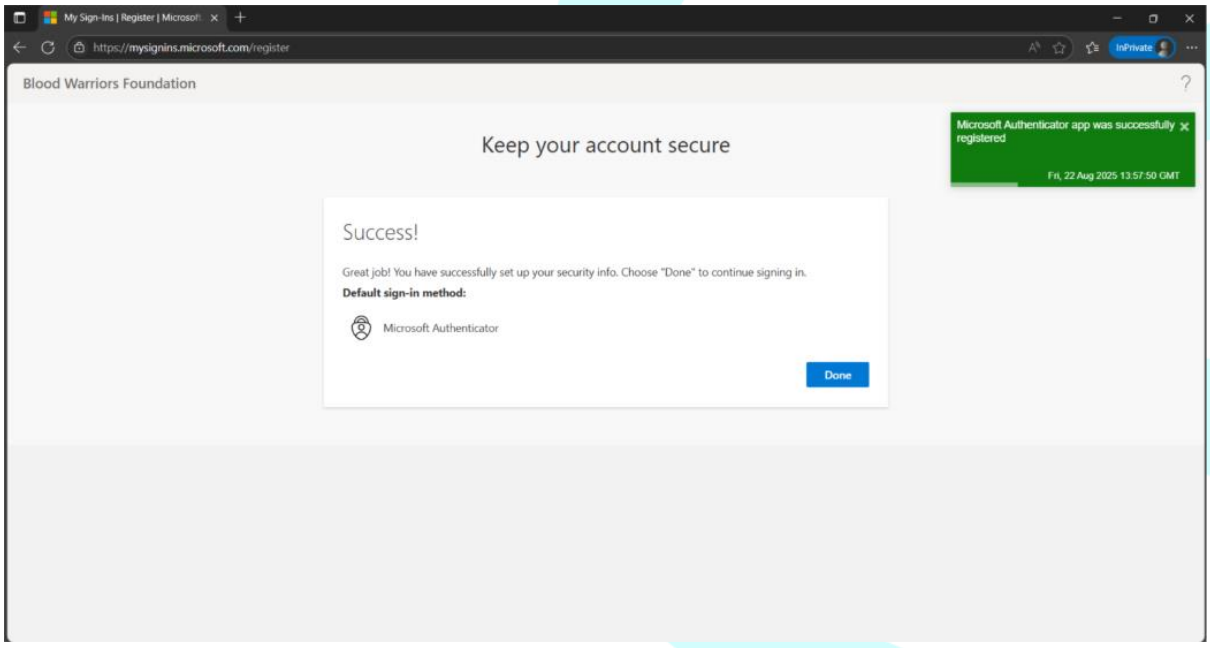
Once you Scan Click on Next



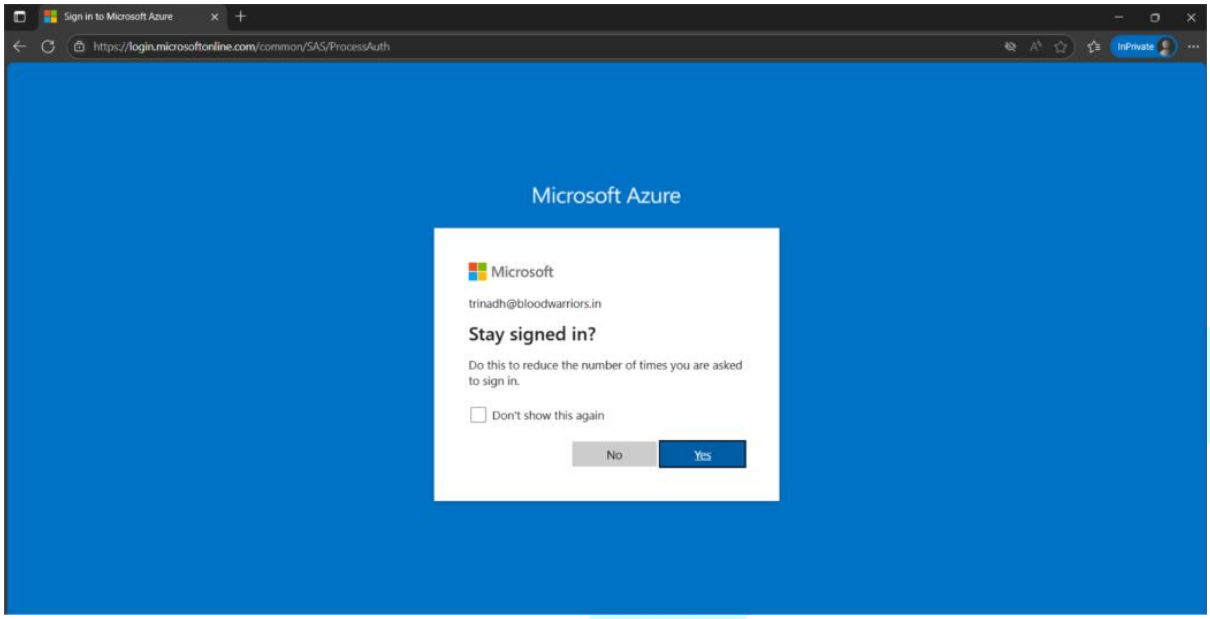
Type code on your Authenticator App which will pop up to enter code. Once you enter and yes on your mobile and wait till reflect on your browser.



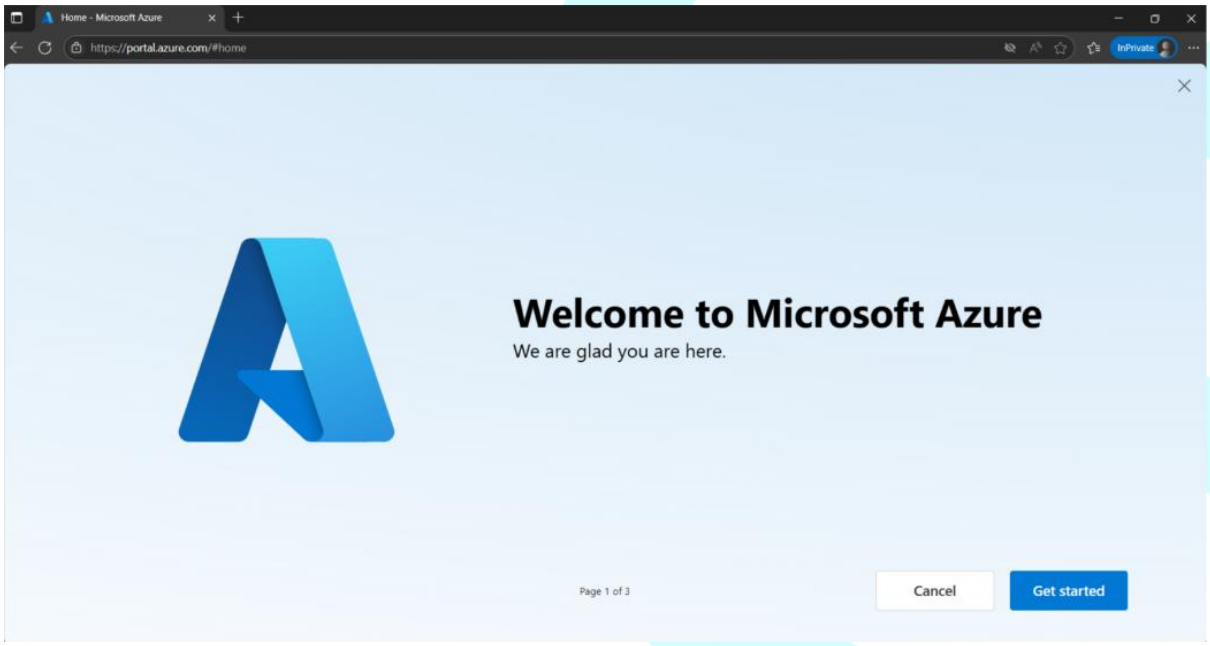
click on next



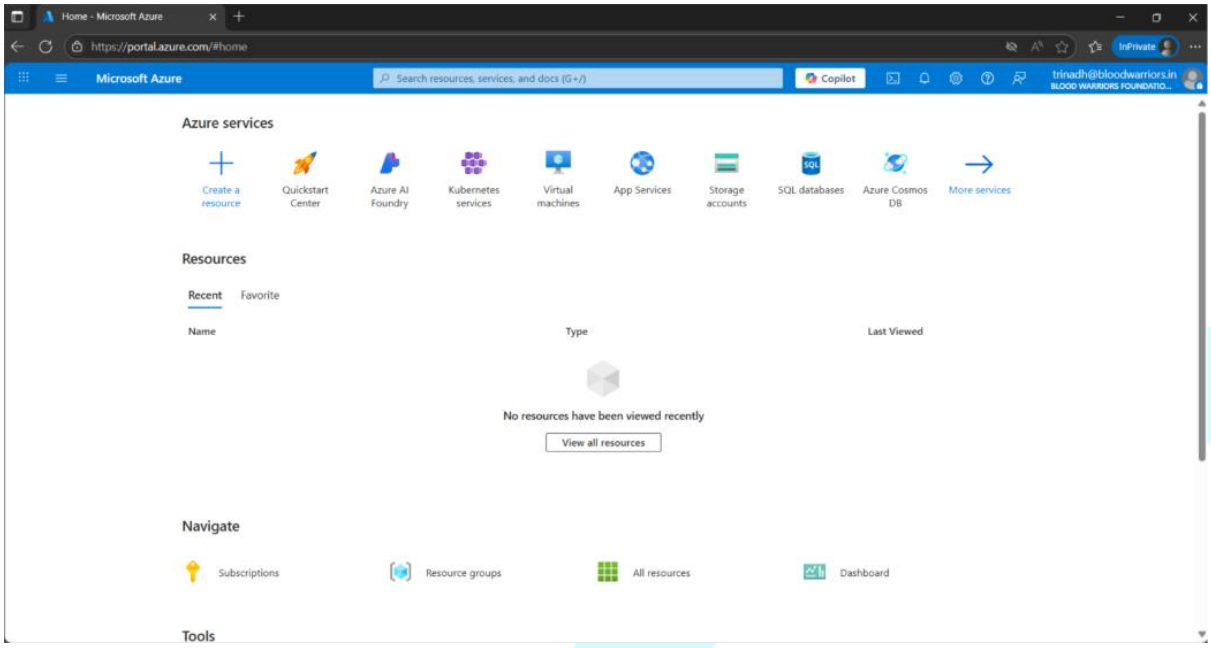
click on Done



Click on Yes

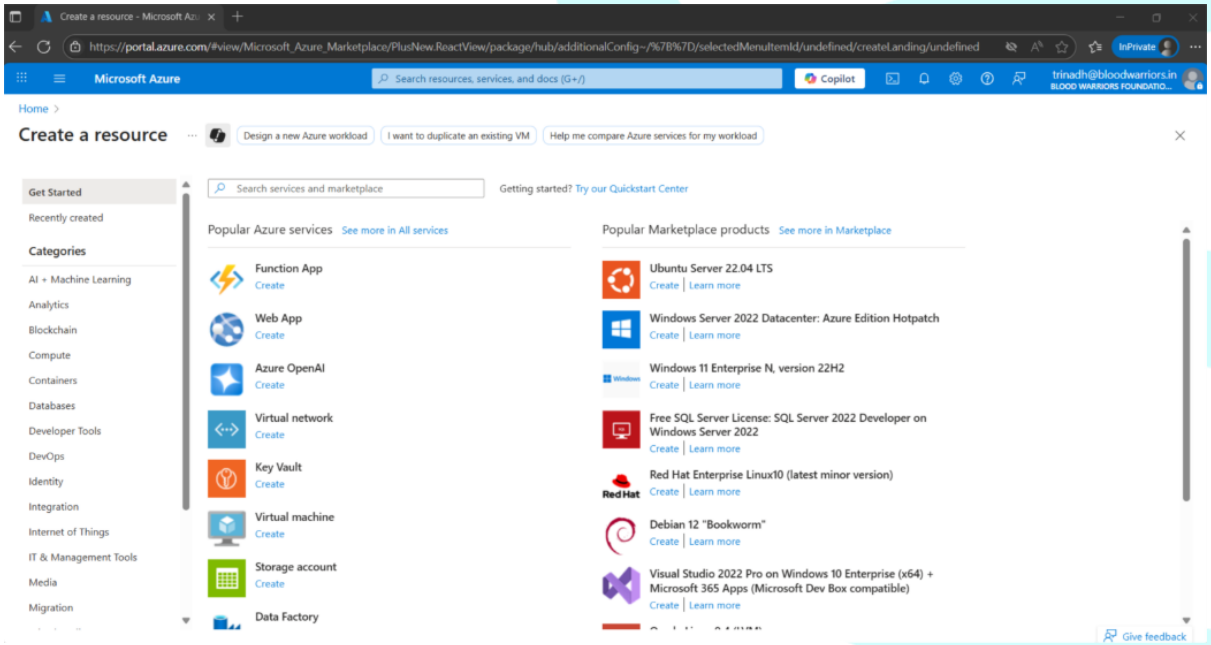


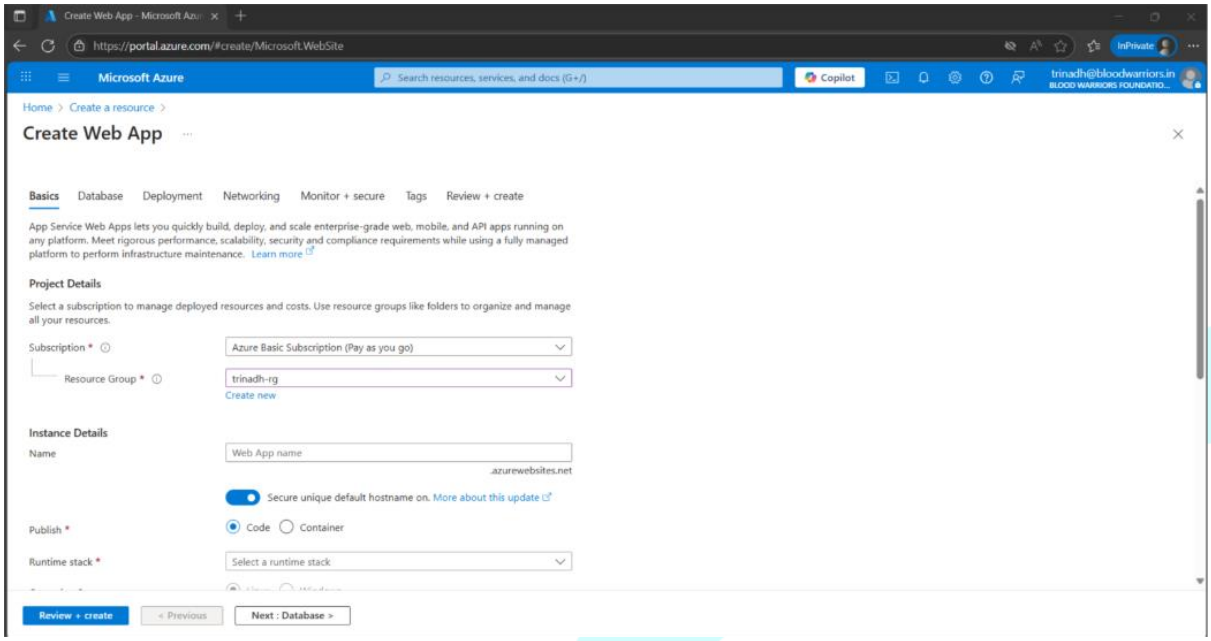
Click Get Started

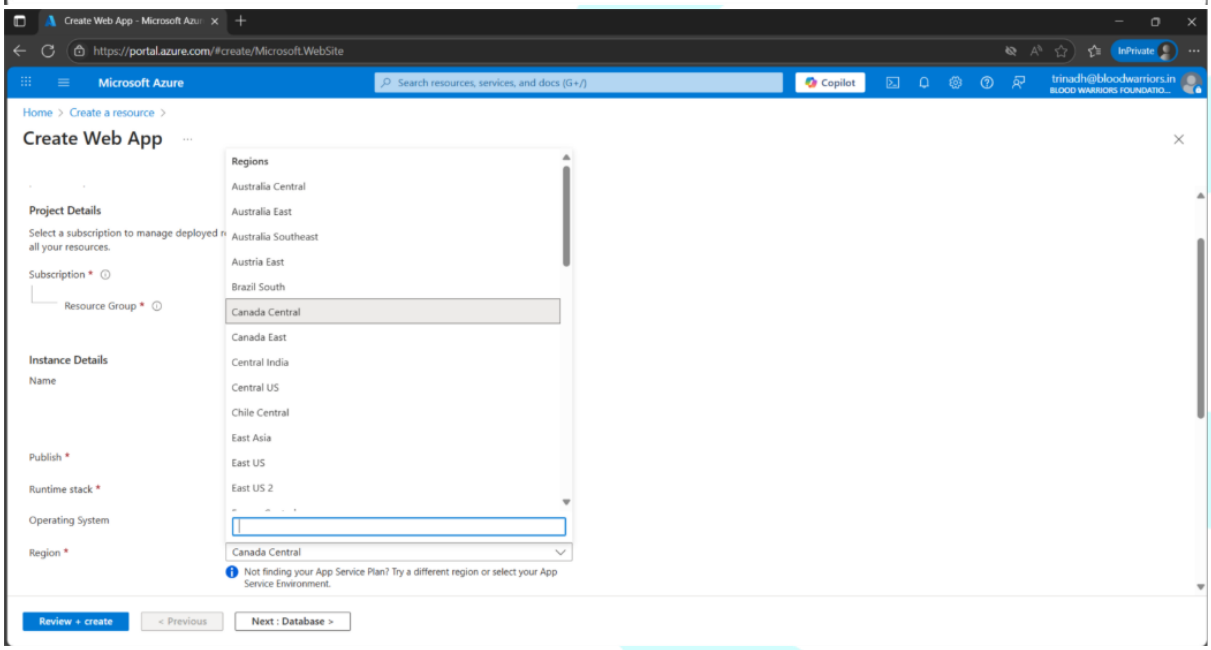


Azure Setup is completed

2. Create your Resource:







Azure Resource Setup & Role Assignments – User Guide

1. Azure SQL Database

Goal: Deploy a single Azure SQL Database.

Steps:

- In the Azure Portal, go to **SQL Databases**.
- Select **Create** under *Single database*.
- On the **Basics** tab:
  - Choose subscription and resource group.
  - Name the database.
  - Create or select an existing server (unique name, region, admin credentials).
  - Set options (e.g., elastic pool = No, workload environment).
- **Review + Create**.

Role Assignment:

- Navigate to the SQL Database resource → **Access Control (IAM)** → **Add role assignment**.
- Choose roles like:
  - *SQL DB Contributor*.
  - *SQL Security Manager*.
  - *Reader*.

🔗 https://learn.microsoft.com/en-us/azure/azure-sql/database/single-database-create-quickstart

2. Azure Machine Learning (Workspace + Compute Instance)

Goal: Set up an ML environment.

Steps:

- In **Azure ML Studio** → **Create workspace**.
- Provide workspace details (name, subscription, region, hub optional).
- **Create**.
- Inside workspace → **New > Compute instance**.
- Provide name → **Review + Create**.

Role Assignment:

- Go to the **workspace** → IAM → Assign:
  - *Contributor*.
  - *Reader*.
  - *Owner*.
  - *AzureML Data Scientist*.

🔗 https://learn.microsoft.com/en-us/azure/machine-learning/quickstart-create-resources

3. Azure OpenAI Service

Goal: Provision GPT-capable resource.
Steps:

- In Portal → Create resource → **Azure OpenAI**.
- Fill Basics (subscription, group, name, tier, region).
- Configure **Networking**.
- **Review + Create**.

Role Assignment:

- Go to the OpenAI resource → IAM.
- Assign roles such as:
  - *Cognitive Services Contributor*.
  - *Cognitive Services User*.

🔗 https://learn.microsoft.com/en-us/azure/ai-foundry/openai/how-to/create-resource

4. Azure App Service (Web App Deployment)

Goal: Deploy a web app.
Steps:

- Create resource → **App Service**.
- Configure basics (name, runtime, region, plan).
- **Review + Create**.

Role Assignment:

- IAM → Assign roles like:
  - *Web Plan Contributor*.
  - *Website Contributor*.
  - *Reader*.

🔗 https://learn.microsoft.com/en-us/azure/app-service/quickstart

5. Azure Storage (Blob / Table / Queue)

Goal: Create storage accounts.
Steps:

- Create resource → **Storage account**.
- Configure (subscription, group, location, replication, performance).
- Create containers, tables, queues.

Role Assignment:

- IAM → Assign roles:
  - *Storage Blob Data Contributor*.
  - *Storage Queue Data Contributor*.
  - *Storage Table Data Contributor*.
  - *Reader*.

🔗 https://learn.microsoft.com/en-us/azure/storage/common/storage-account-create

6. Azure Data Factory
Goal: Create ETL pipelines.
Steps:

- Create resource → **Data Factory**.
- Configure (subscription, group, name, version, region).
- Author pipelines.

Role Assignment:

- IAM → Assign:
  - *Data Factory Contributor*.
  - *Reader*.

🔗 https://learn.microsoft.com/en-us/azure/data-factory/quickstart-create-data-factory-portal

7. Azure Service Bus / Event Grid
Goal: Messaging infrastructure.
Steps – Service Bus:

- Create resource → **Service Bus**.
- Configure namespace, tier, region.

Steps – Event Grid:

- Create resource → **Event Grid Topic**.
- Add topics/subscriptions.

Role Assignment:

- IAM roles include:
  - *Azure Service Bus Data Sender*.
  - *Azure Service Bus Data Receiver*.
  - *EventGrid Contributor*.

🔗 Service Bus: https://learn.microsoft.com/en-us/azure/service-bus-messaging/service-bus-quickstart-portal
🔗 Event Grid: https://learn.microsoft.com/en-us/azure/event-grid/custom-event-quickstart-portal

8. Azure Logic Apps
Goal: Workflow automation.
Steps:

- Create resource → **Logic App (Consumption/Standard)**.
- Configure (name, group, plan).
- Build workflows.

Role Assignment:

- IAM → Assign roles:

- *Logic App Contributor*.
- *Logic App Operator*.
- *Reader*.

🔗 https://learn.microsoft.com/en-us/azure/logic-apps/quickstart-create-first-logic-app-workflow

9. Azure Functions

Goal: Deploy function apps.

Steps:

- Create resource → **Function App**.
- Configure basics (runtime, plan, region).
- Create and author functions.

Role Assignment:

- IAM roles:
  - *Function App Contributor*.
  - *Reader*.

🔗 https://learn.microsoft.com/en-us/azure/azure-functions/functions-create-function-app-portal

10. Virtual Machine (VM)

Goal: Create a VM.

Steps:

- Create resource → **Virtual Machine**.
- Configure (name, OS, size, credentials, disks, networking).
- **Review + Create**.

Role Assignment:

- IAM roles:
  - *Virtual Machine Contributor*.
  - *Reader*.
- Optionally assign **RBAC for VM login**:
  - *Virtual Machine Administrator Login*.
  - *Virtual Machine User Login*.

🔗 https://learn.microsoft.com/en-us/azure/virtual-machines/windows/quick-create-portal

11. Azure Cosmos DB

Goal: Multi-model distributed DB.

Steps:

- Create resource → **Azure Cosmos DB**.
- Choose API (SQL, MongoDB, Cassandra, Gremlin, Table).
- Configure basics (name, location, capacity mode).

- Optionally enable **global distribution**.

Role Assignment:

- IAM roles:
  - *Cosmos DB Account Contributor*.
  - *Cosmos DB Operator*.
  - *Cosmos DB Reader*.

🔗 https://learn.microsoft.com/en-us/azure/cosmos-db/create-cosmosdb-resources-portal

12. Azure AI FOUNDRY

1. Overview

This document explains how to deploy **Azure AI Foundry** (Cognitive Services accounts of kind AIServices) across multiple resource groups using a **PowerShell script**.

The script reads a CSV with resource group names and locations, then creates AI Foundry accounts **in parallel** with throttling to avoid Azure API limits.

2. Prerequisites

2.1 System Requirements

- **Operating System:** Windows 10 or Windows 11
- **Software Installation:**

  To install PowerShell7 using Winget:

  1. Open PowerShell5.
  2. Run the following commands:

     powershell

     winget search Microsoft.PowerShell

     winget install --id Microsoft.PowerShell --source winget

  - For reference, here is a YouTube tutorial: https://www.youtube.com/watch?v=BYUHFb3PwoE

    To install Azure CLI on Windows using PowerShell, run:

    powershell

    $ProgressPreference = 'SilentlyContinue'; Invoke-WebRequest -Uri https://aka.ms/installazurecliwindows -OutFile .\AzureCLI.msi; Start-Process msiexec.exe -Wait -ArgumentList '/I AzureCLI.msi /quiet'; Remove-Item .\AzureCLI.msi

  - For guidance, see this video: https://www.youtube.com/watch?v=PP2ymD7rRWE

2.2 Permissions

- Ensure you have an Azure subscription with **Contributor** or **Owner** role on the resource groups where AI Foundry will be deployed. (Permissions should already be assigned to all users.)
- You must be logged into Azure CLI with appropriate credentials.

2.3 CSV Input File

Prepare a CSV file named **input_details.csv** with the following columns and sample data:

DisplayName	UserPrincipalName	rgname	Location
demo1	demo1@bloodwarriors.in	demo1-rg	eastus

- **rgname:** Azure Resource Group name
- **DisplayName:** User display name
- **UserPrincipalName:** User email (e.g., demo1@bloodwarriors.in)
- **Location:** Azure region where AI Foundry will be deployed.

Save this CSV file in the same directory as your deployment script.

3. Deployment Steps

Step 1: Clone or Create the Deployment Script

Save the deployment script as **deploy-ai-foundry.ps1** in your working directory.

Step 2: Prepare the CSV File

Ensure the **input_details.csv** file is ready with the required resource groups and location data as described.

Step 3: Log In to Azure

Open PowerShell and use the following command to log in:

az login -> Prompt -> Login with User Credentials

az account set --subscription "dfcd9032-9c16-4e4c-a6f1-92f202ad529b"

Step 4: Run the Deployment Script

Execute the script by running:

.\deploy-ai-foundry.ps1

4. Output

The AI Foundry accounts will be created in each specified resource group.

For example, account names will follow this format:

demo1-ai-foundry

Regions Suggestions:

- EastUS
- WestUS
- West Europe
- North Europe

- Central US