Loyalist College in Toronto

Lab 09a - Implement Web Apps

Lab 09b - Implement Azure Container Instances

Lab 09c - Implement Azure Container Apps

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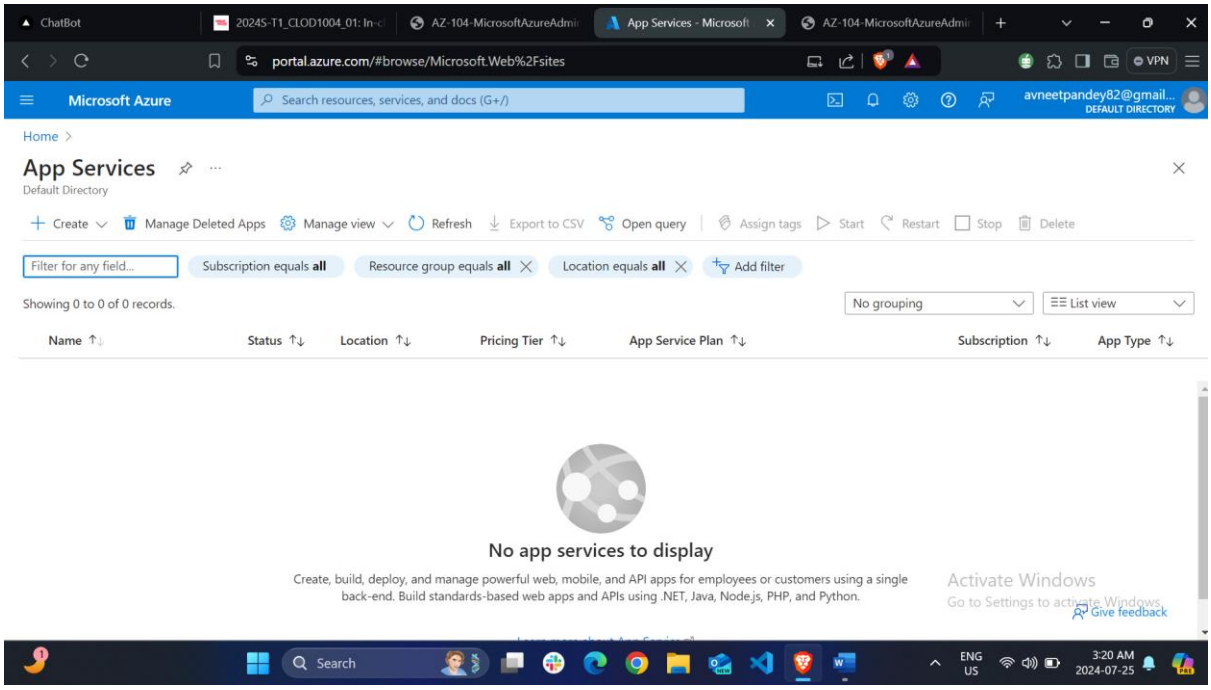
Lab 09a – Implement Web Apps

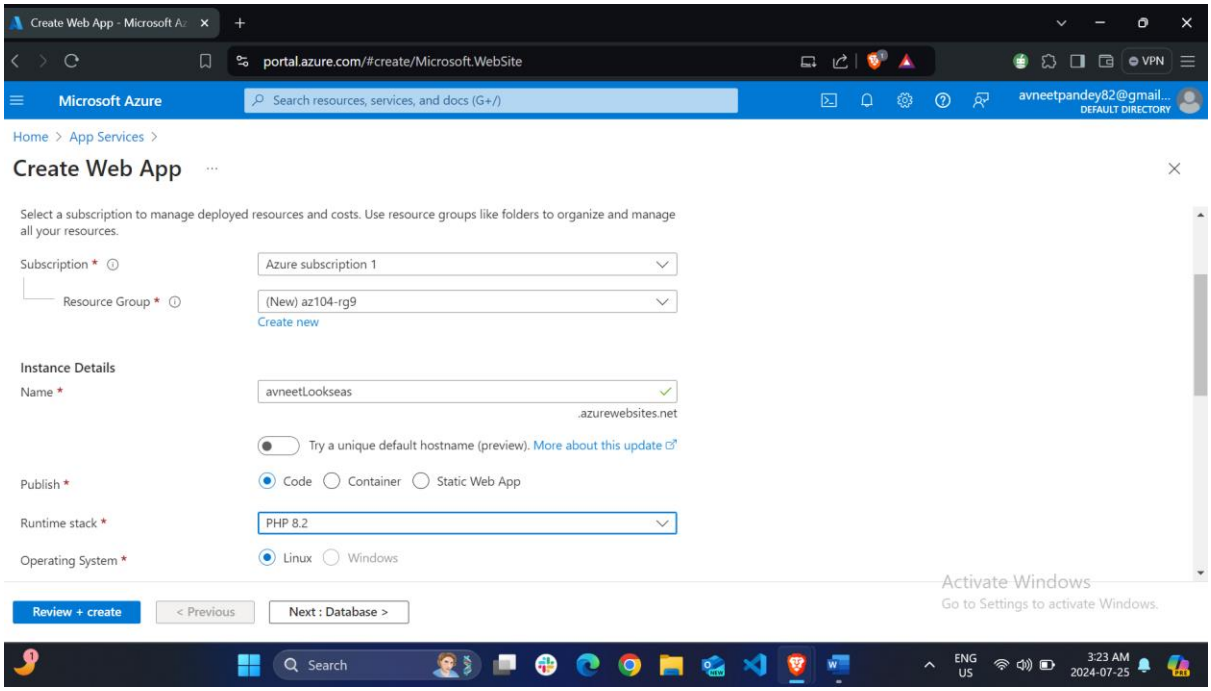
In this lab we will learn to configure web app to deploy in external github repositories.

Task 1: Create and configure an Azure web app.
Here in this task we will use Azure PAAS service known as Azure App services which hosts most runtime environment.

Step 1: Go to the Azure Portal and search for new App Service to create new app service.



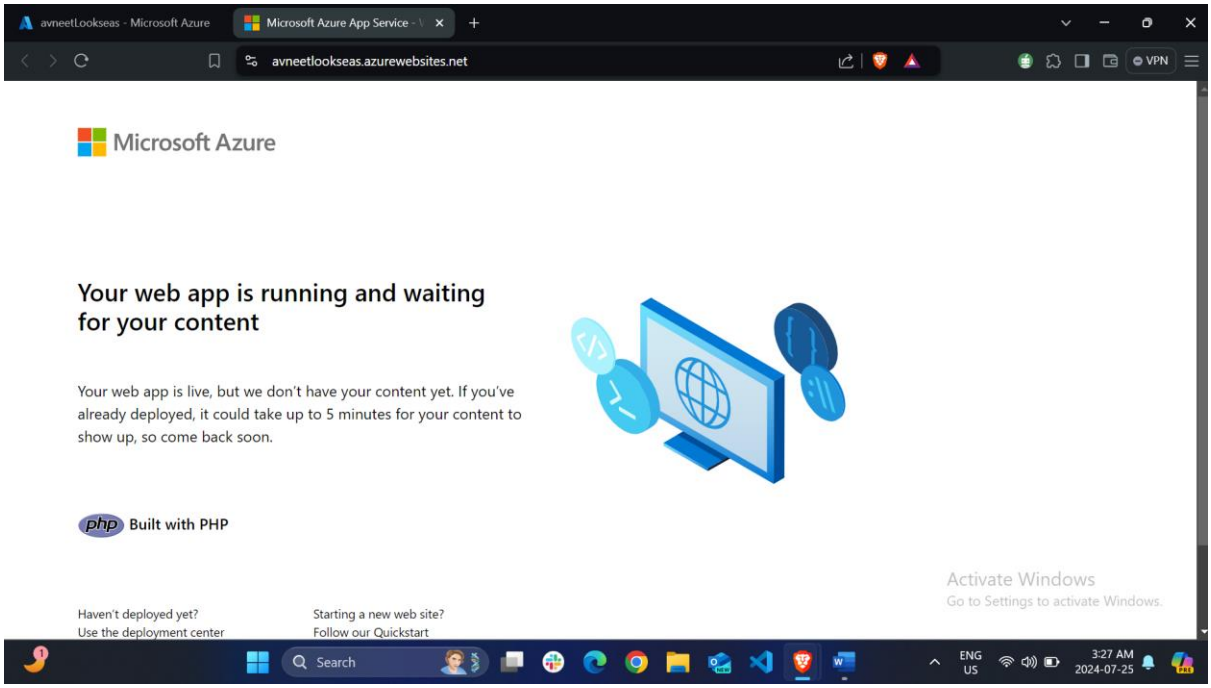
Step2: Create new Web APP Service with the given configuration



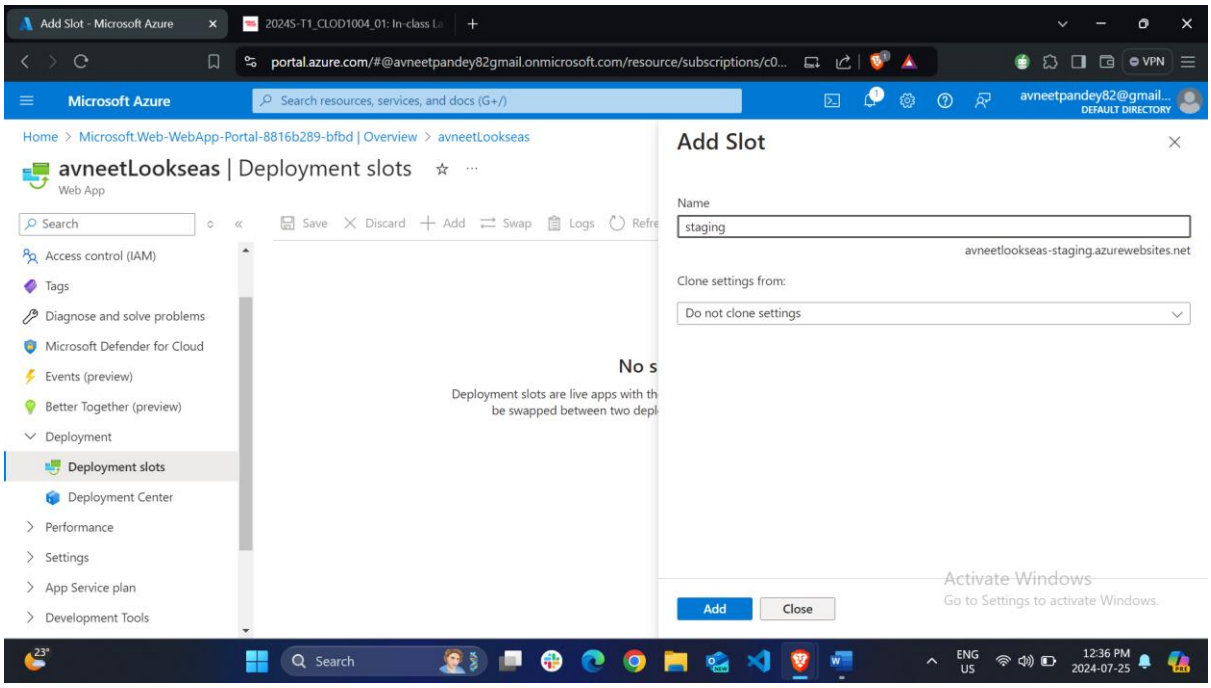
Task 2: Create and configure a deployment slot

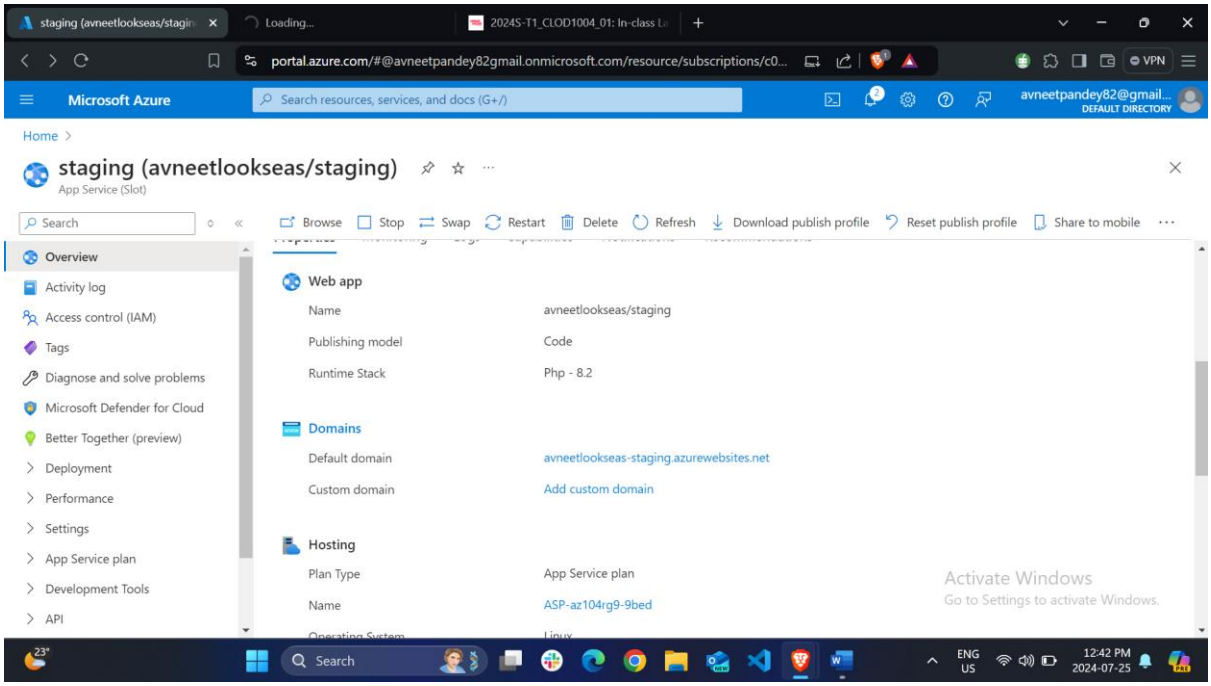
Create a staging deployment slot which will gonna help a lot in the future to test the application before pushing to directly to the main branch

Step 1: GO to the domains section to add the get the url of your website. Open it new tab which will open up the below page.



Step 2: Back to azure portal and add a slot from the deployment section. Explore the newly create slot and find the url generated for it is different from the one you tried before.

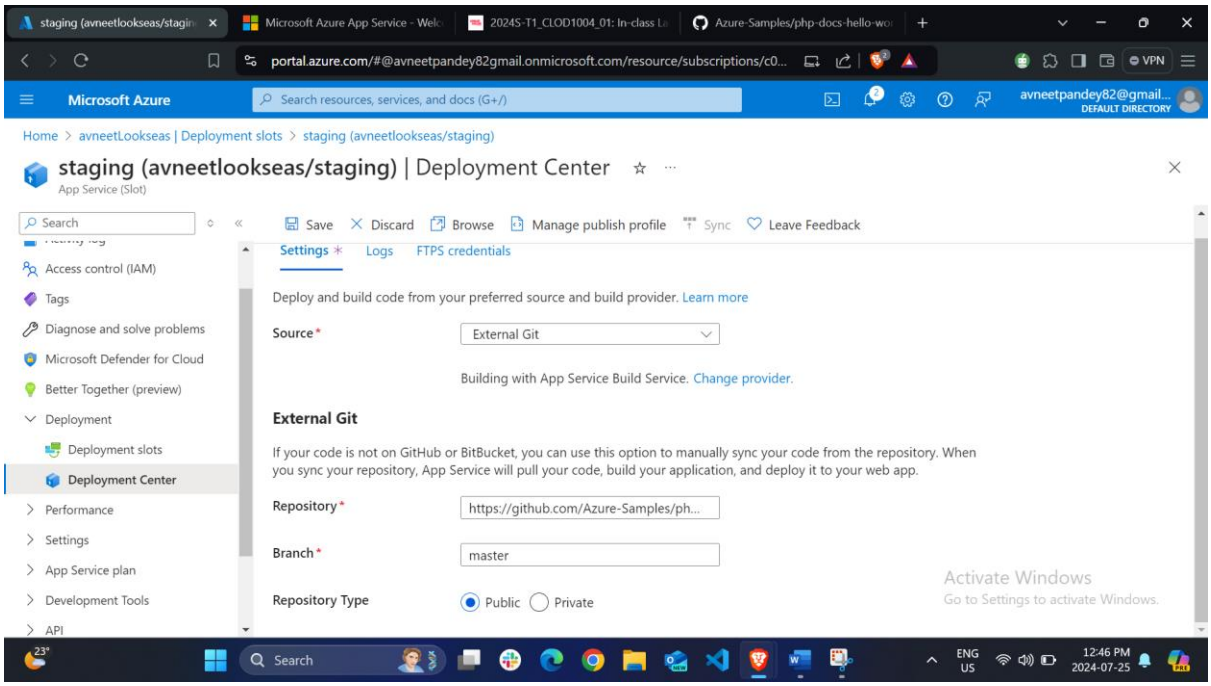




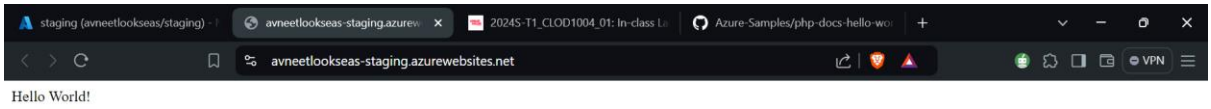
Task 3: Configure Web App deployment setting

In this step we will created configuration of the web app deployment so it can ensure app service should have latest version of the application.

Step 1: Go to the stagging slot and navigate to the deployment center and select the setting where you'll find the source option, select the external git and add the git repository in the mentioned field. Make sure to save the changes.



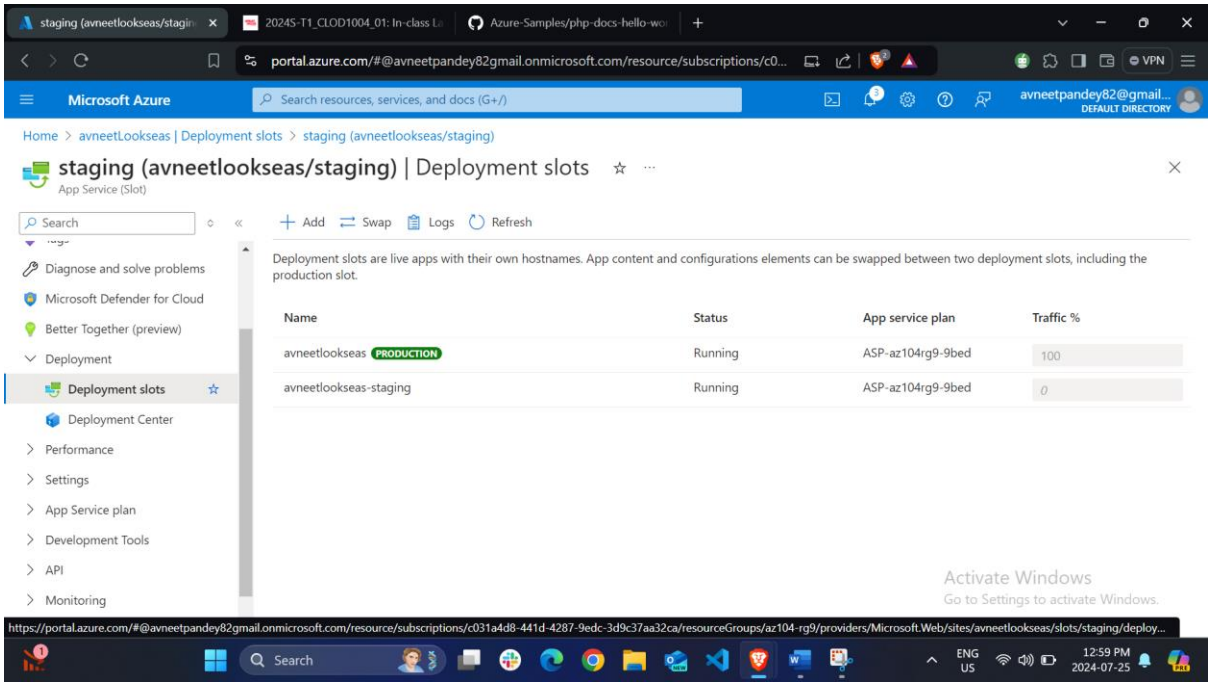
Step 2: Make sure to visit the url to check the hello world in your application.

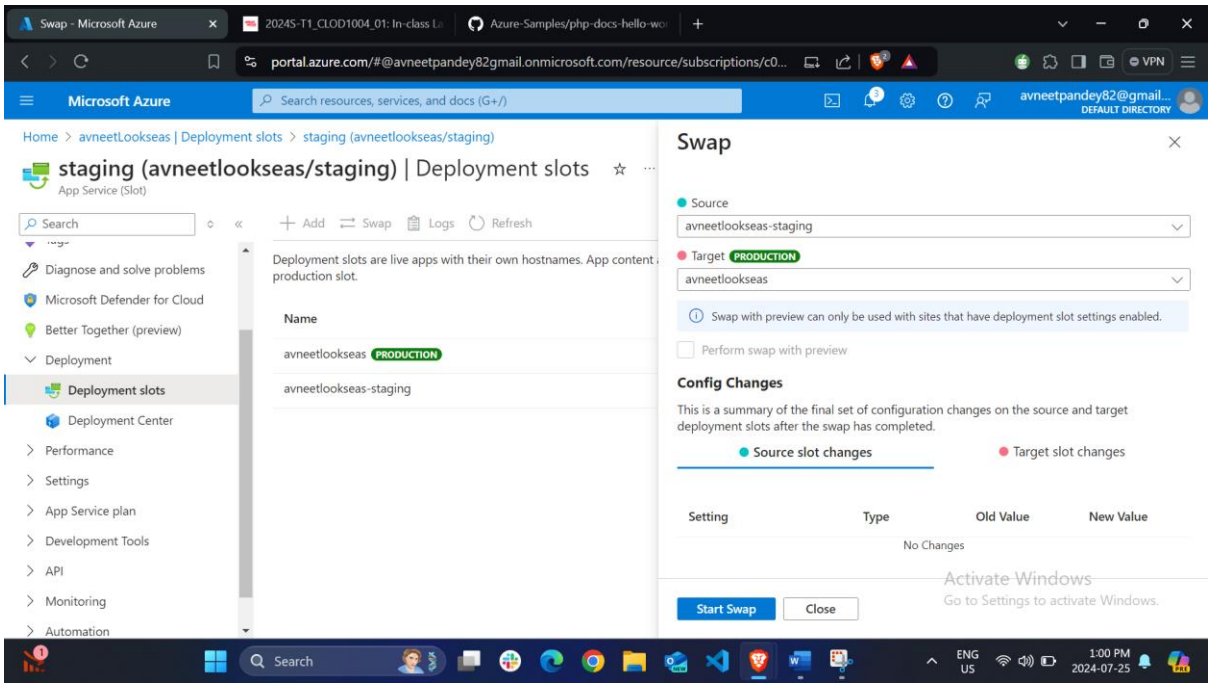


Task 4: Swap deployment slots

In this step we'll swap the stagging slot with the production slot. So to test the application we can utilize the stagging slot and once the testing is done swap the code to the in the production slot.

Step 1: Navigate to the deployment slot from the blade and click on the swap





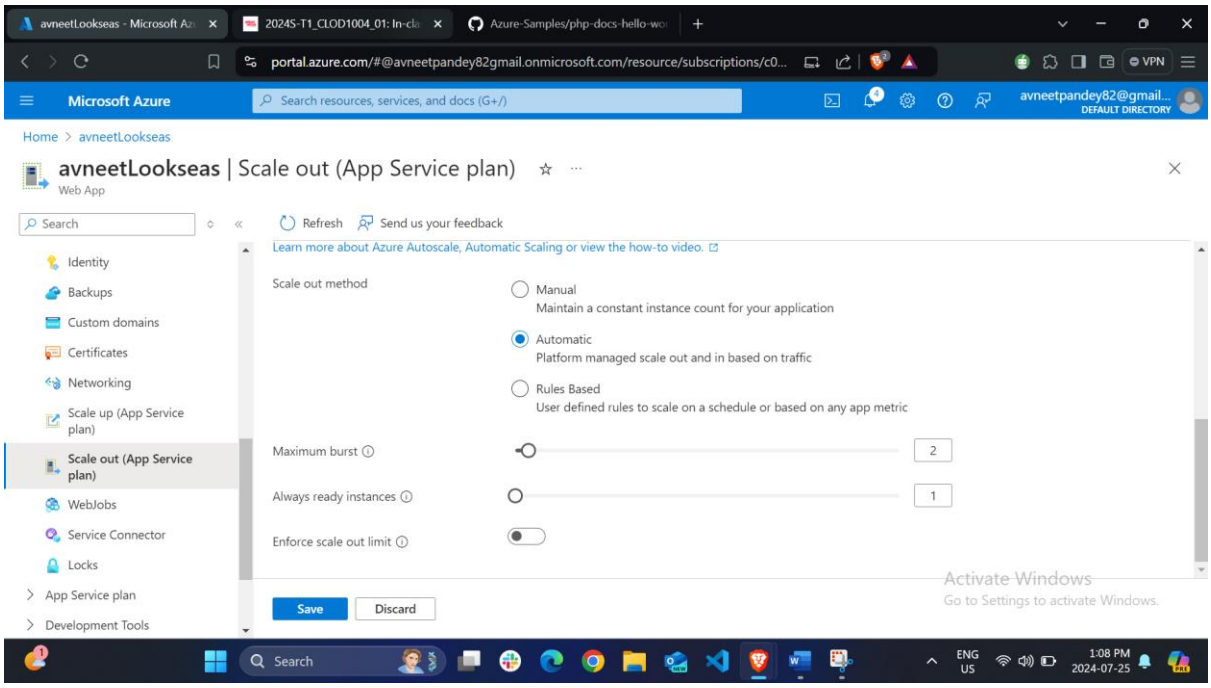
Step2: Check the production url too to verify the swapping is successfully done or not.

Hello World!

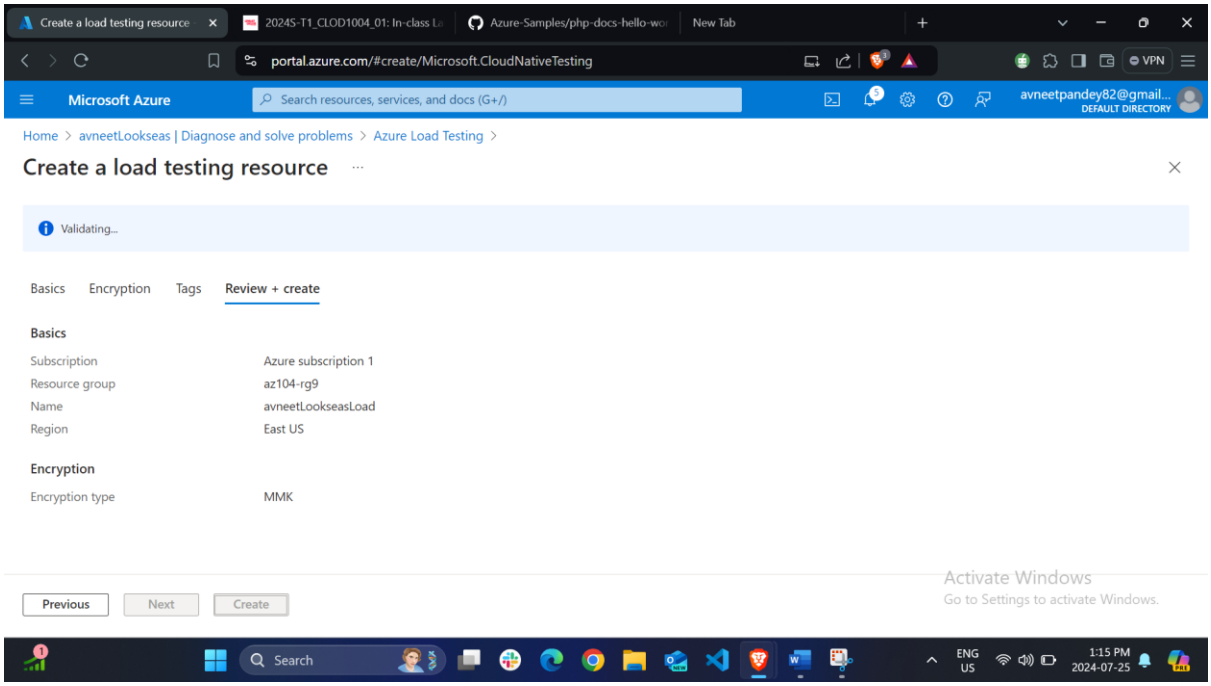
Task 5: Configure and test autoscaling of the Azure Web App

In this step we'll configure the autoscaling of the azure app. It helps to maintain the performance of the web application which increase the resources if the traffic increases on the website.

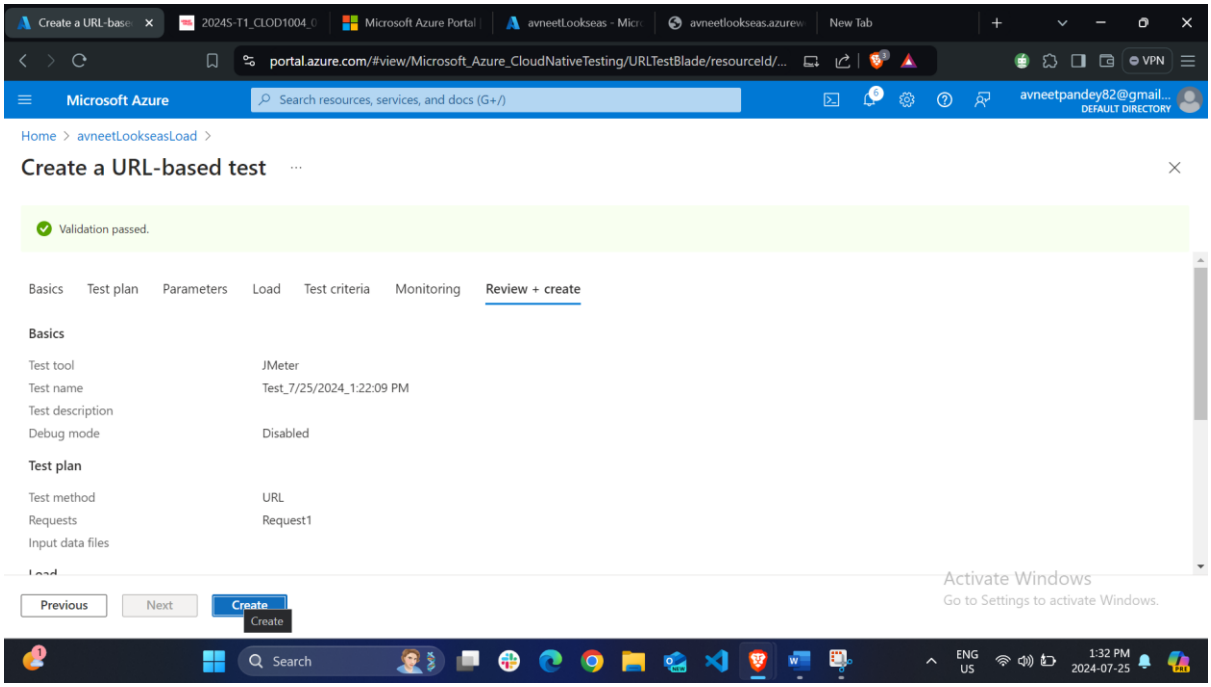
Step1: Make sure you're on the deployment stage and select the scale out option from the blade and implement the mentioned changes.



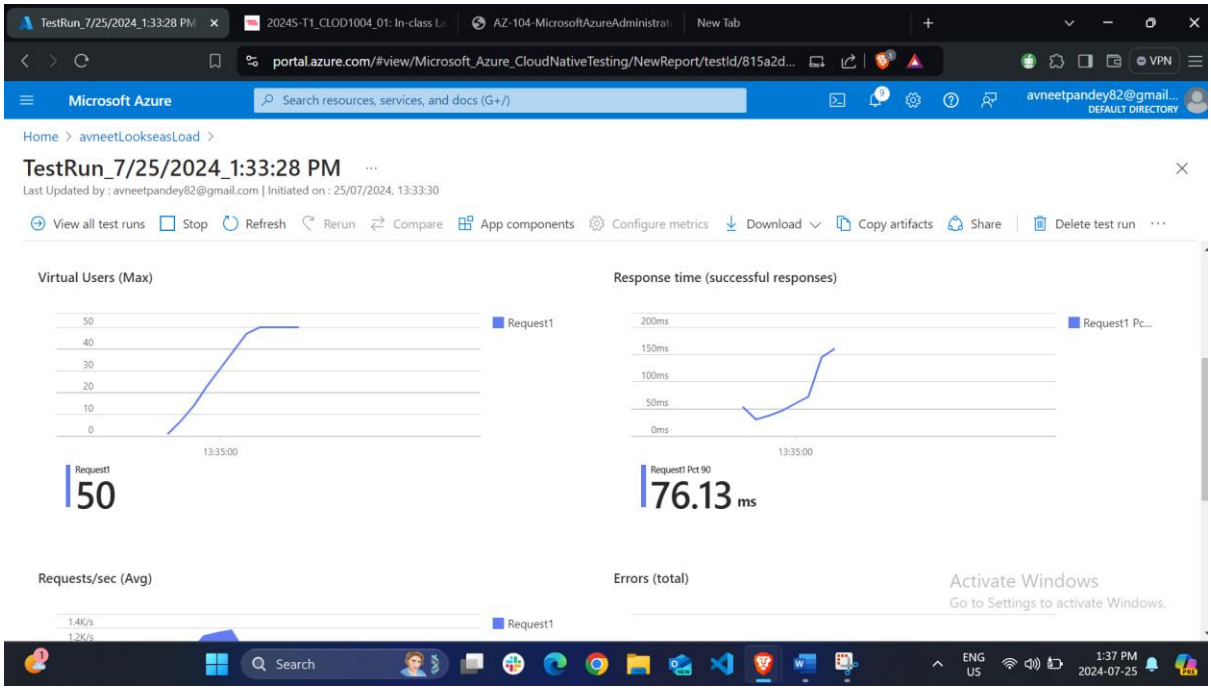
Step2: Go to the diagnose and solve problems and create load to increase the load on the web application.

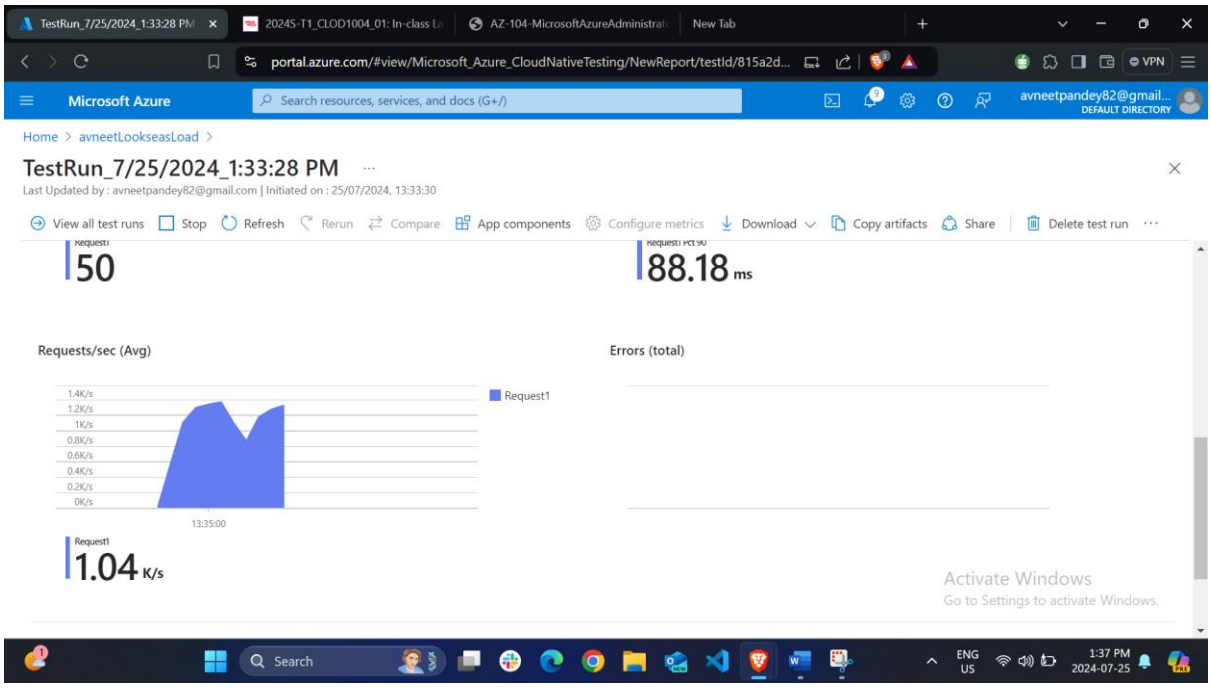


Step 3: Go to the resources and create http requests. Make sure to enter the url.



Step4: Review the test Results including virtual user, response time and request/sec



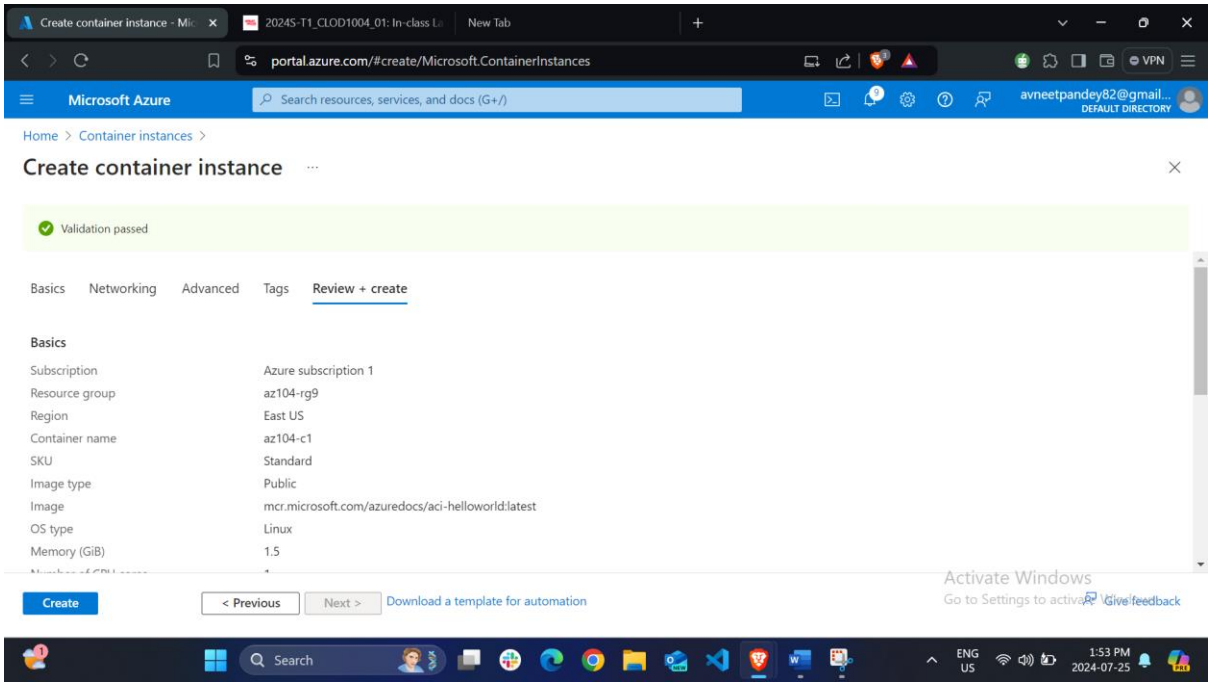


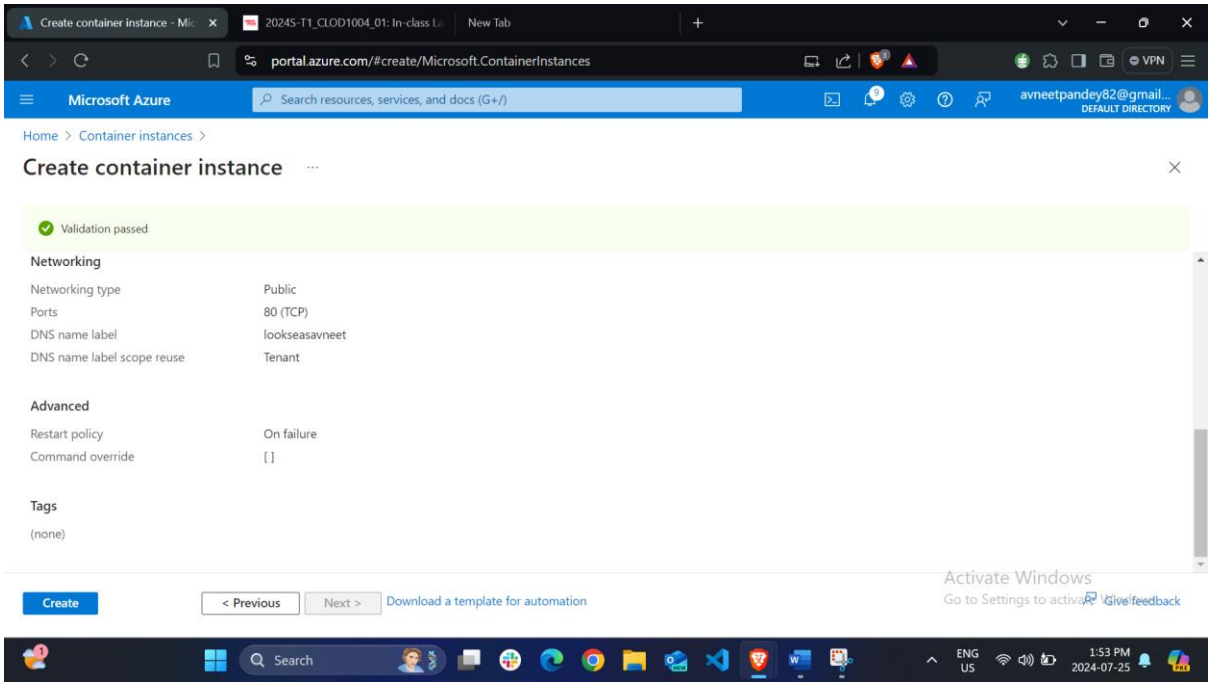
Lab 09b - Implement Azure Container Instances

Learn how to deploy azure container instance based on the situation where we want to move our the web application deployed in vm to the cloud without having large number of servers. So we decide to create new container instances and docker.

Task 1: Deploy an Azure Container Instance using a Docker image

Step 1: Go to the container instances and create new instance with the given configuration.

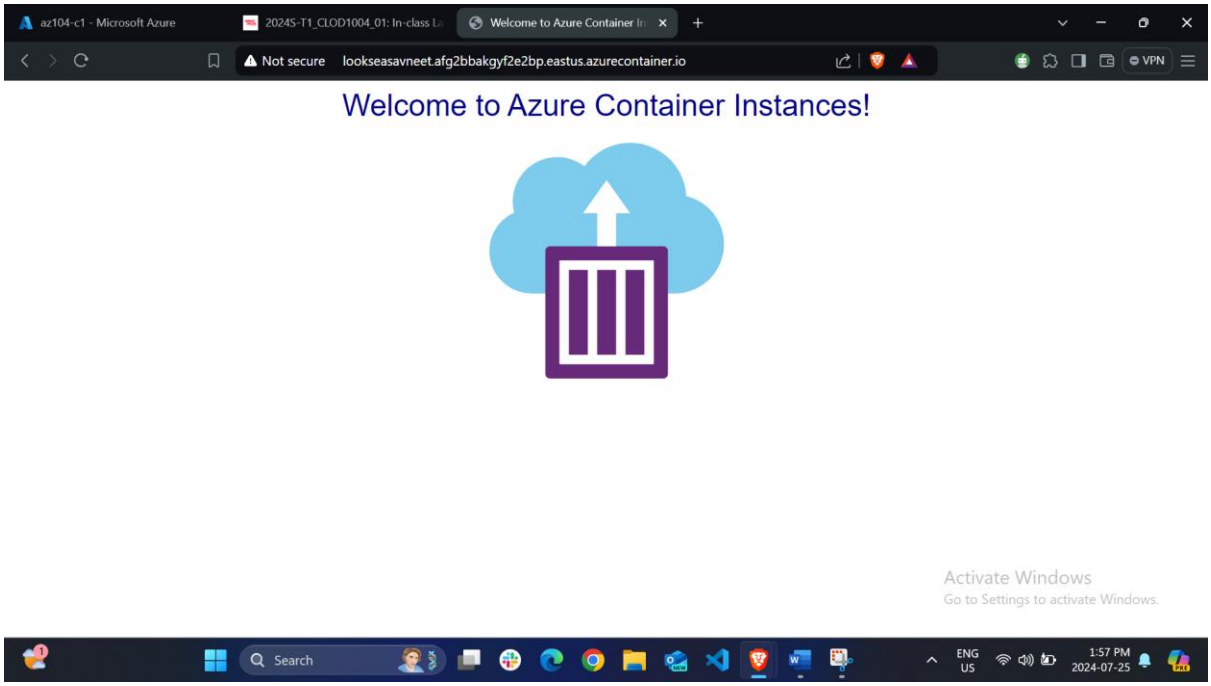




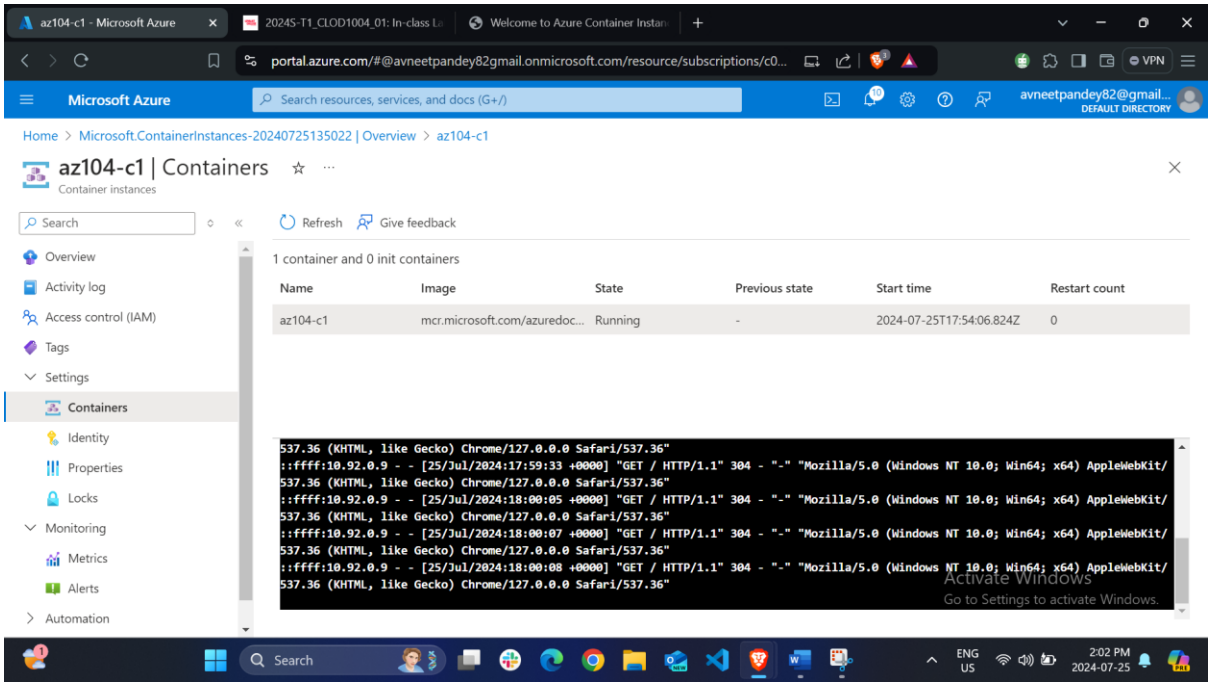
Task 2: Test and verify deployment of an Azure Container Instance

Here we will test the deployment of an azure container. This instance be default exist in the port 80.

Step 1: Firstly go to the resources and verify that status is running. Then copy the url mentioned in the FQDN



Step2: Refresh the page to add entry logs. GO to the settings section of the container instances then click logs.

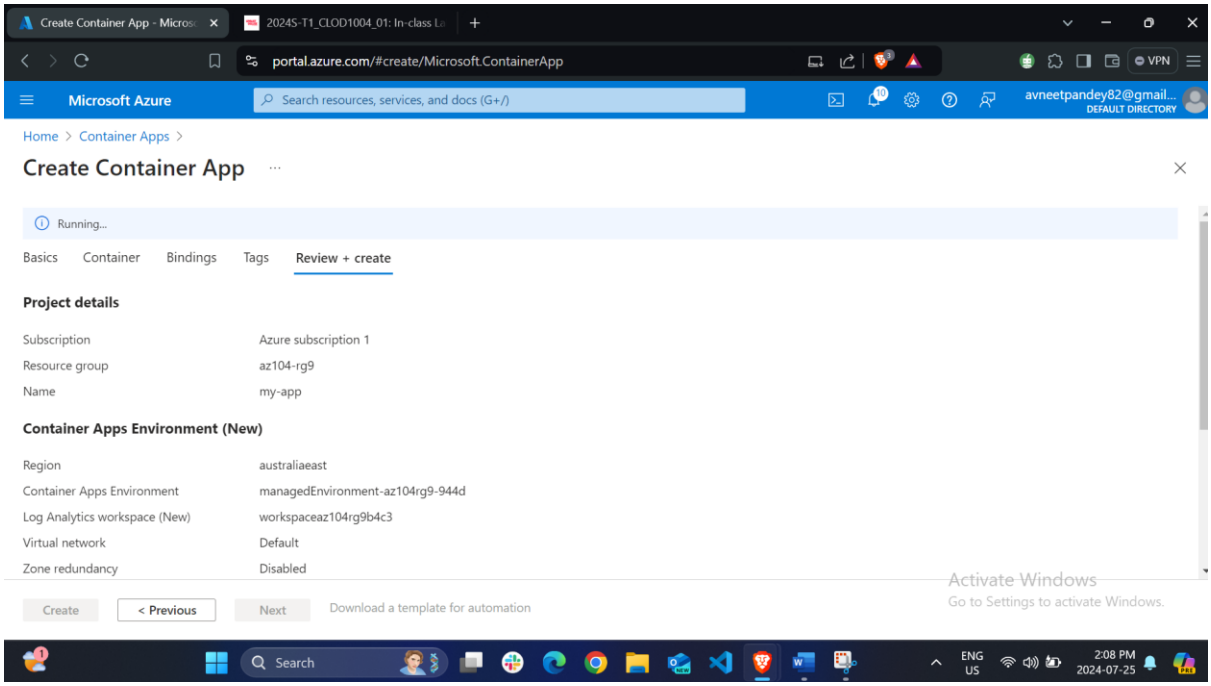


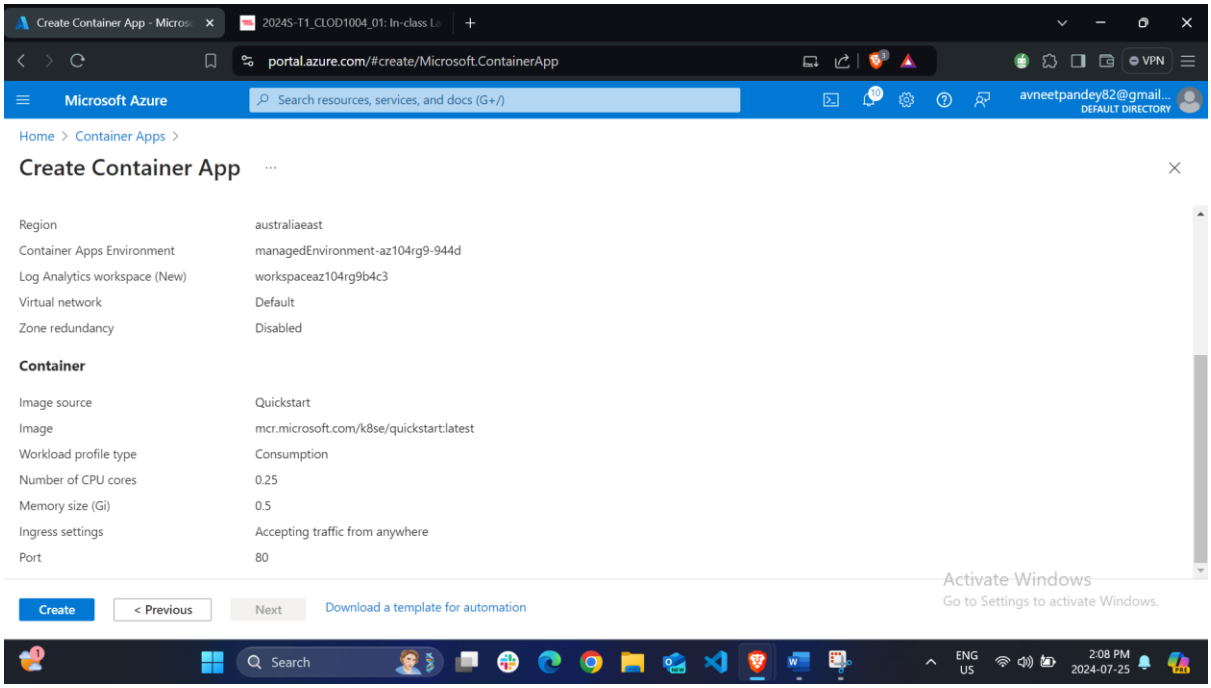
Lab 09c - Implement Azure Container Apps

Here we'll learn about the implementation for azure container apps. We have same scenario as above one but now we'll use the container apps.

Task 1: Create and configure an Azure Container App and environment

Step 1: Go to the container apps in azure portal and create new container app. Create new app using the given configuration.





Task 2: Test and verify deployment of the Azure Container App

In this task we will learn the deployment of the azure container app.