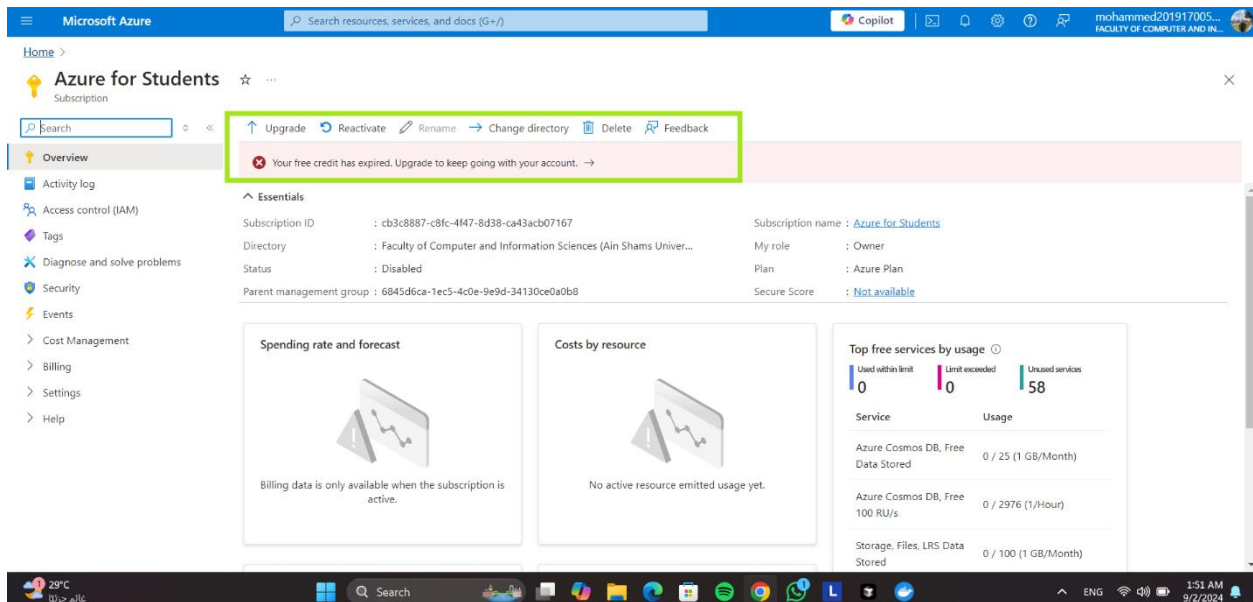


Repo link: <https://github.com/MohamedSamir445/Botit>

Docker image link:

<https://hub.docker.com/repository/docker/mohamedsamir7744/botit-app/general>

App URL : I don't use any cloud provide because I don't have any subscription now



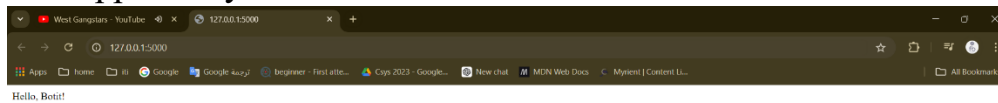
Pipeline tool: Github Action

1st

Run script_req.py to install all requirements

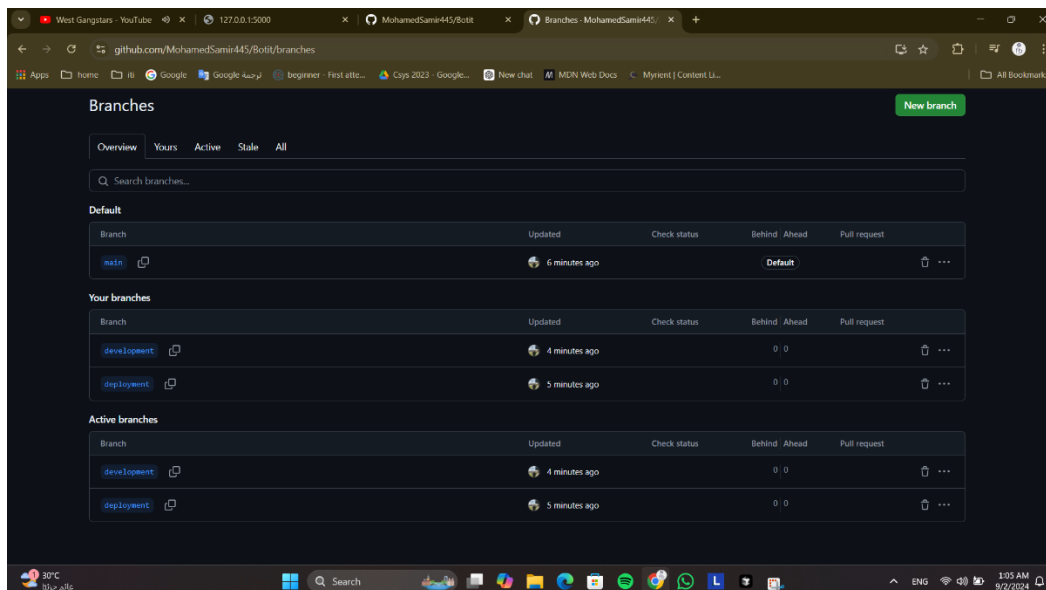
2nd

Run app locally



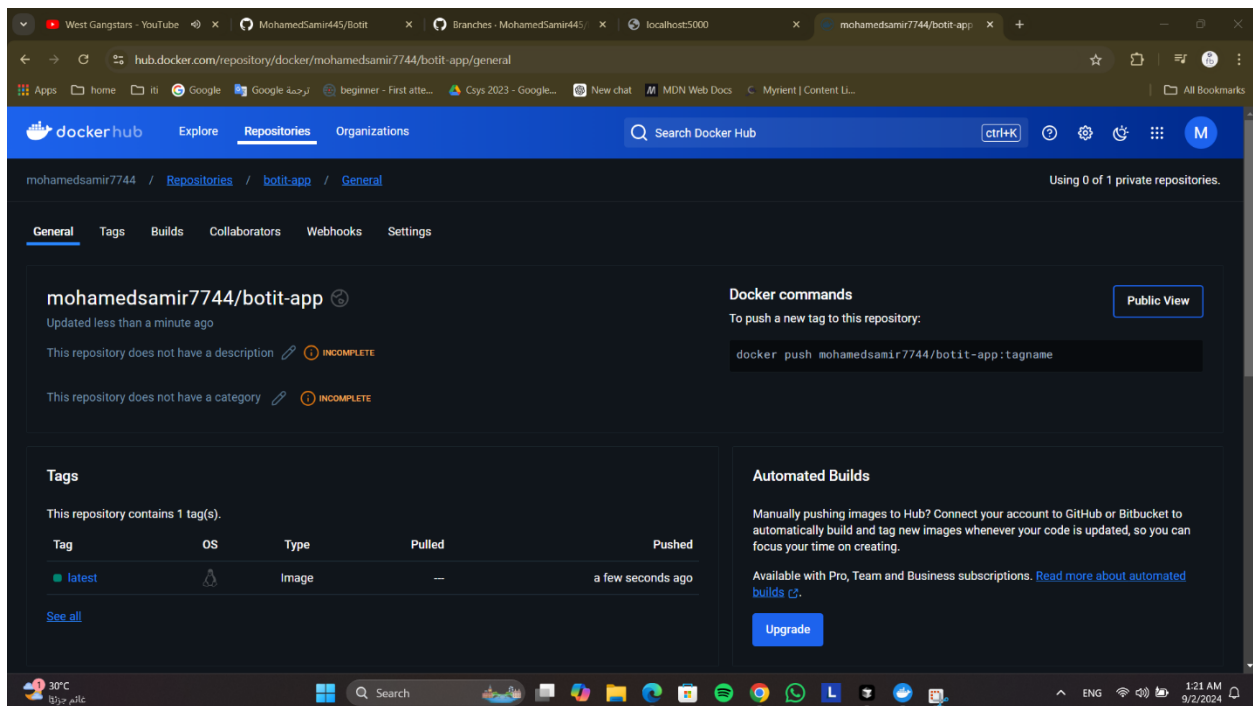
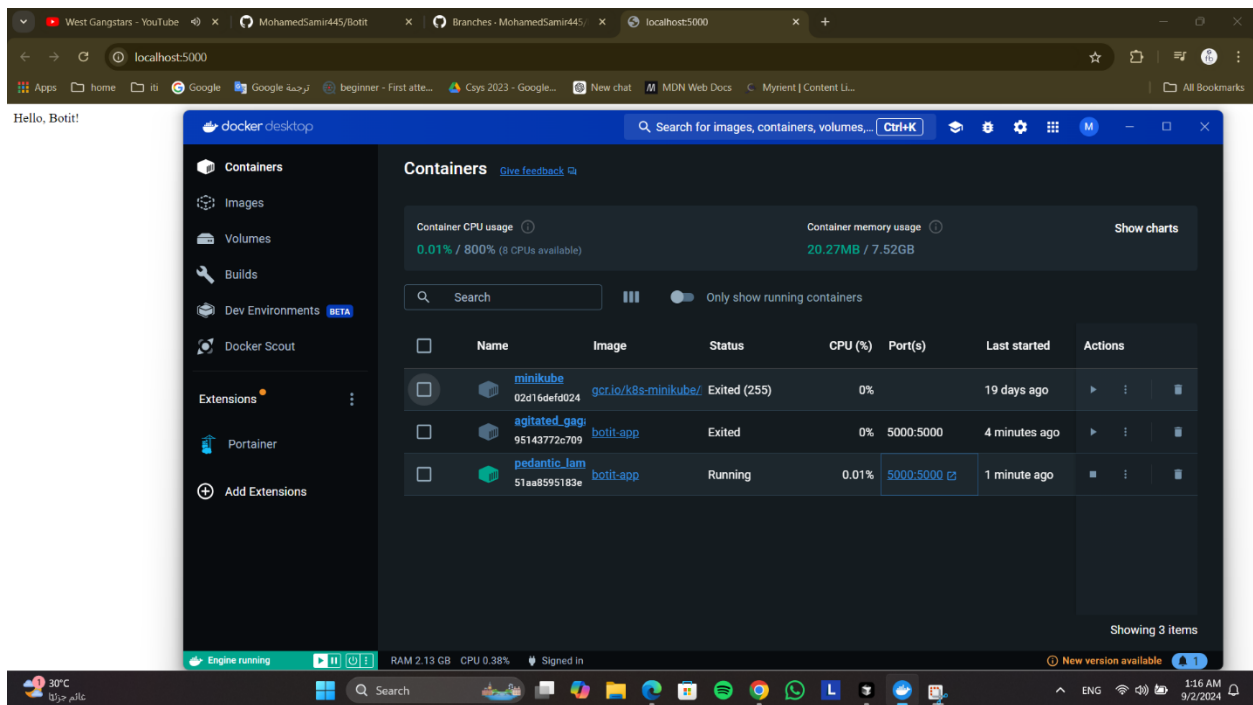
3rd

Create github repo with 2 branches



4th

Create dockerfile and build image & push it on dockerhub



5th

Create deployment.yaml that use docker image from dockerhub & service.yaml to deploy app on k8s cluster

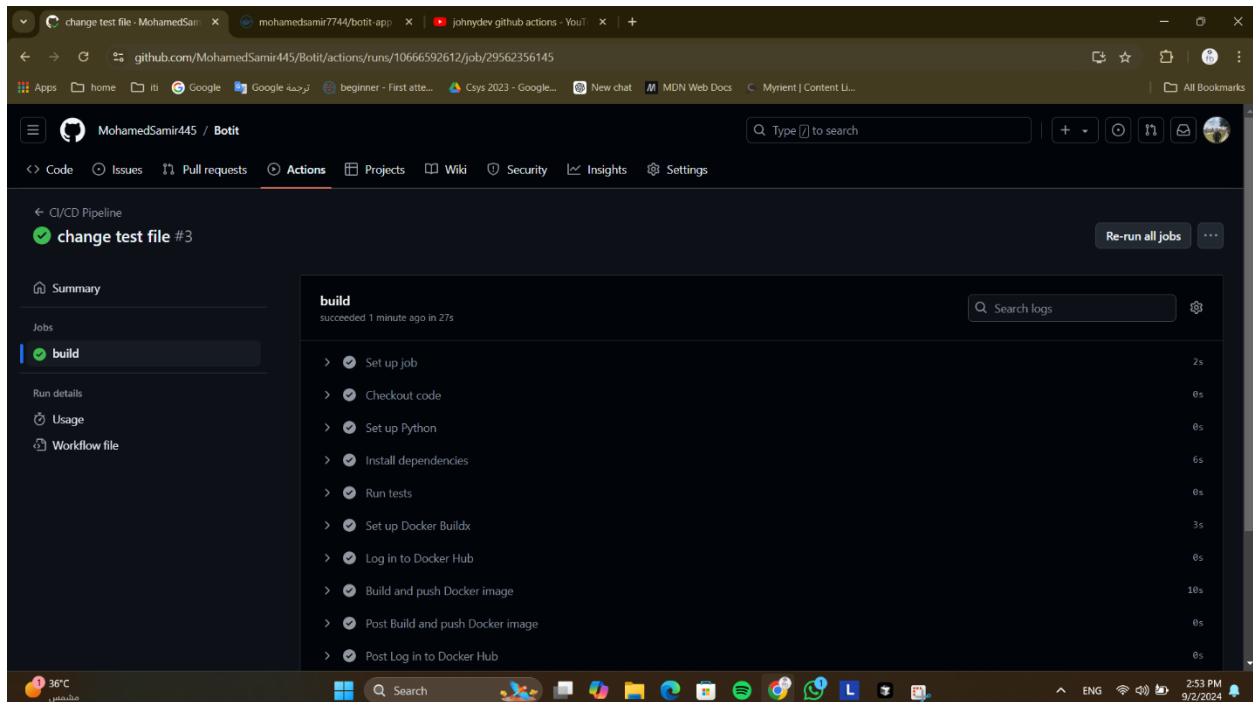
In this step I should use cloud provider but unfortunately my subscription in azure and Aws is disable so I continue locally

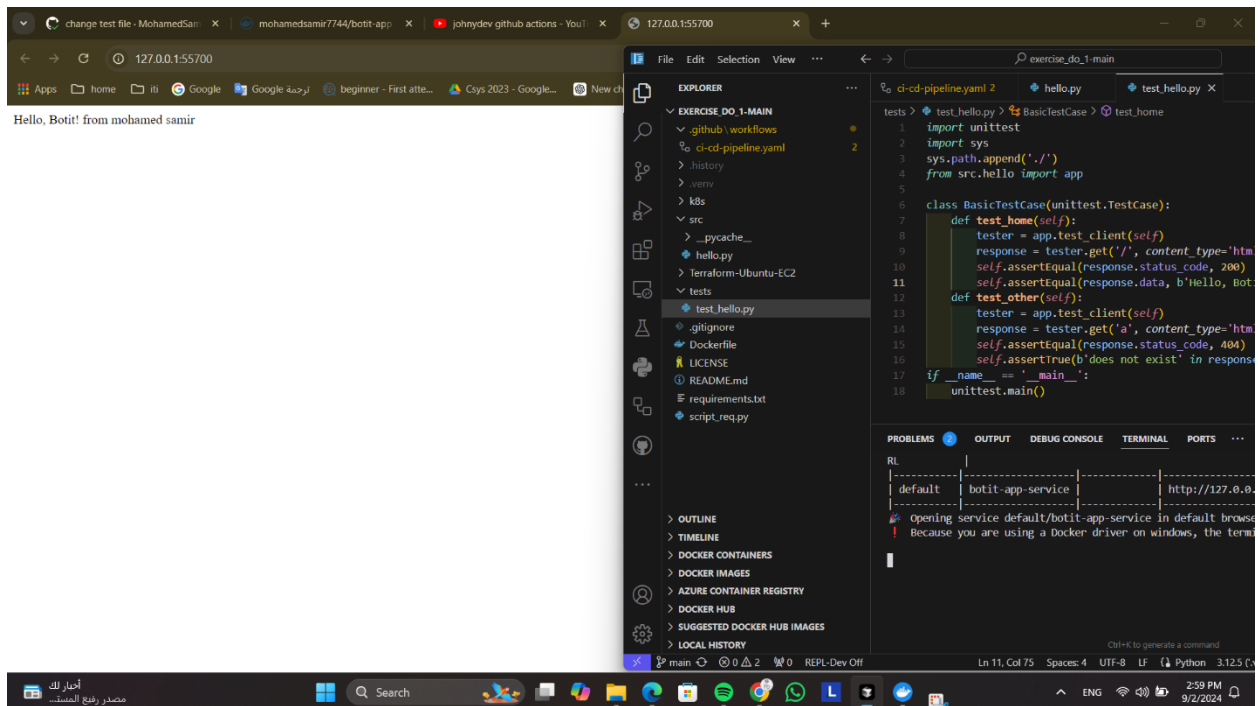
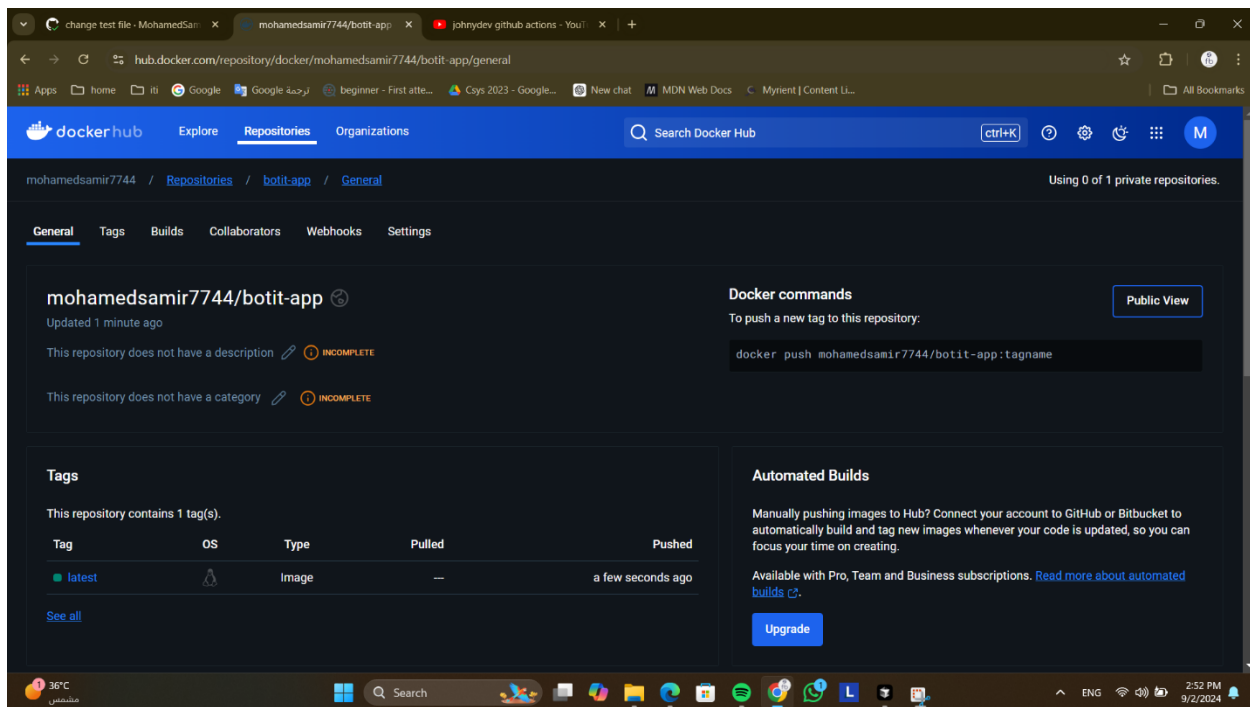
but I used terraform before on Aws to create ec2 ‘this code in repo’

7th

Write CI/CD workflow using GitHub action

Edit code and push it on main branch on Github to see updates in docker Image

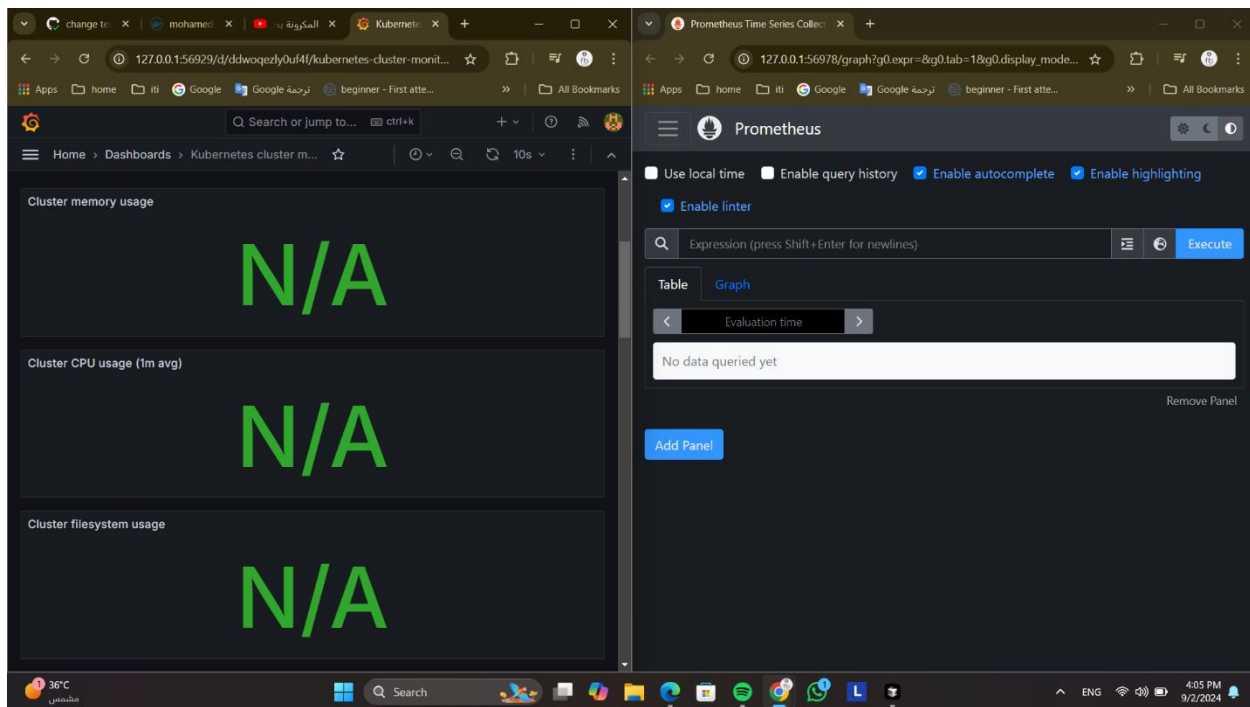




8th

Monitoring

Install Prometheus & Grafana there're more way to install it like using ArgoCD or helm but I use normal Yaml file to deploy it



9th

Used commands

- 1- python script_req.py to install all req
- 2- docker build -t botit-app . to build image
- 3- docker run -p 5000:5000 botit-app to run the container
- 4- docker login
- 5- docker tag botit-app mohamedsamir7744/botit-app:latest
- 6- docker push mohamedsamir7744/botit-app:latest
- 7- Update src/hello.py to specify the host
- 8- minikube start
- 9- kubectl apply -f deployment.yaml
- 10- kubectl apply -f service.yaml
- 11- kubectl get deployments
- 12- kubectl get services
- 13- minikube service botit-app-service
- 14- Go to GitHub repository to add docker Secrets
- 15- kubectl apply -f prometheus-deployment.yaml
- 16- minikube service prometheus-service
- 17- make Grafana & alertmanager like Prometheus