TASK 03 DOCKER IMAGE DEPLOYMENT USING KUBERNETES

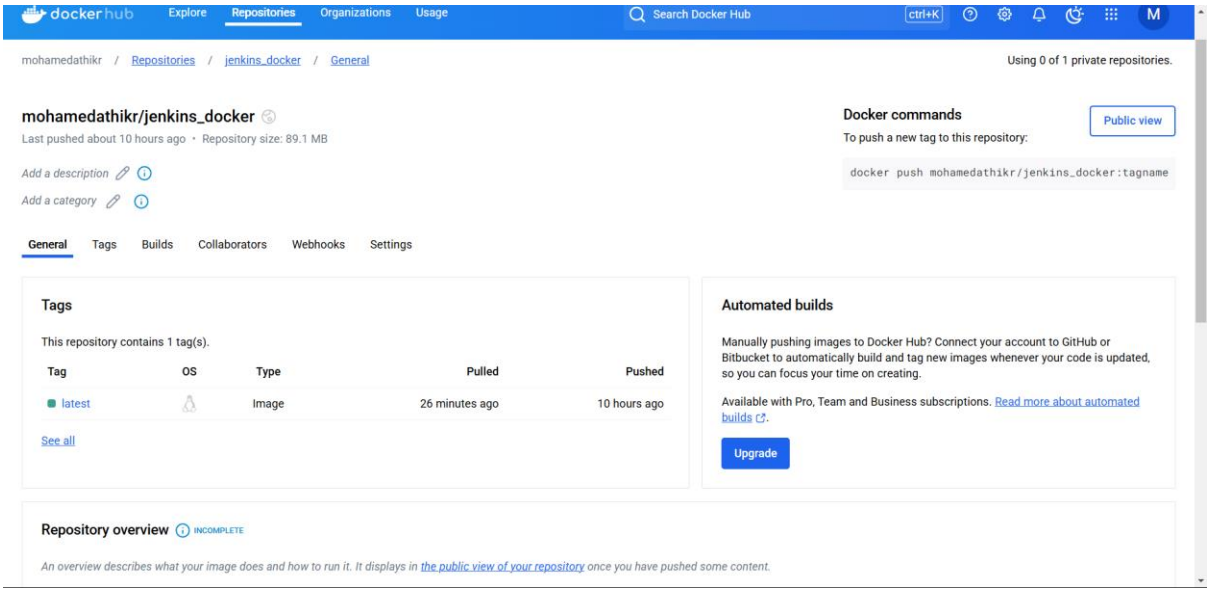
AIM:

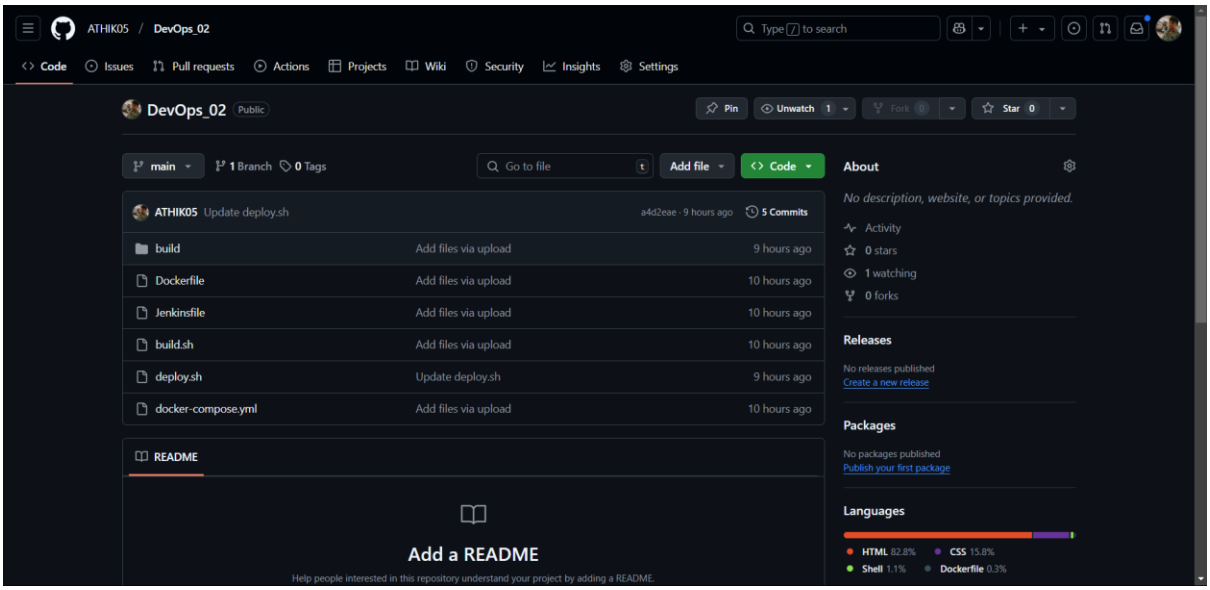
The objective is to push a Docker image to Docker Hub and deploy it on Minikube to ensure that the application runs successfully in a Kubernetes environment. This involves:

Building & Pushing Docker Image:

Creating a Docker image of the application.

Pushing the image to Docker Hub for accessibility.





Setting Up Minikube:

Starting a Minikube cluster locally.

Configuring Minikube to pull images from Docker Hub.

```
PS C:\WINDOWS\system32> winget install Kubernetes.minikube
```

```
PS C:\WINDOWS\system32> minikube version
minikube version: v1.35.0
commit: dd5d320e41b5451cdf3c01891bc4e13d189586ed-dirty
PS C:\WINDOWS\system32>
```

```
PS C:\WINDOWS\system32> kubectl create deployment hello --image=mohamedathikr/jenkins_docker --port=80
```

```
PS C:\WINDOWS\system32> kubectl expose deployment hello --type=NodePort --port=80
```

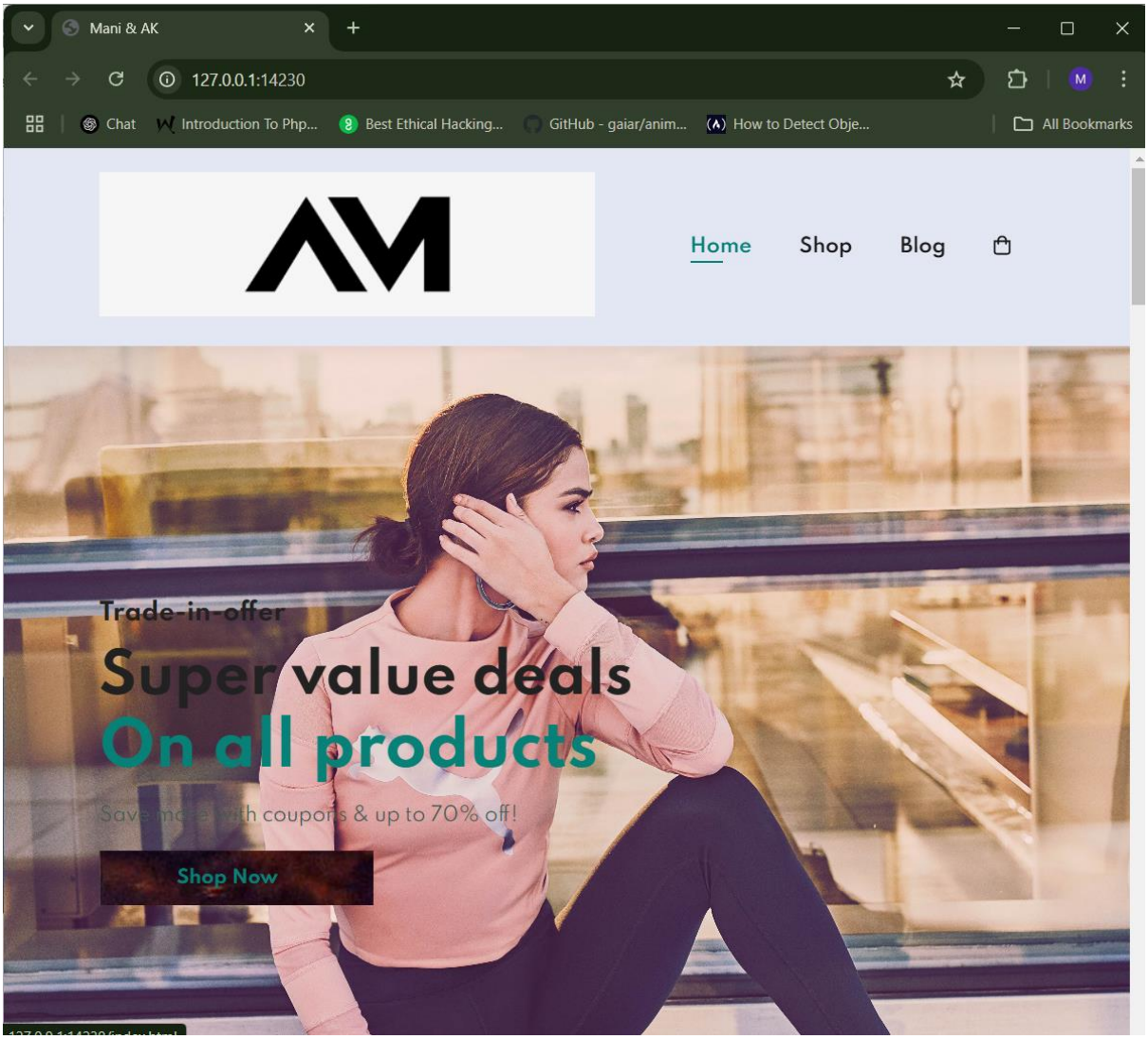
```
PS C:\WINDOWS\system32> minikube service hello
```

Verifying Deployment:

Checking if the pods are running.

Accessing the application through Minikube service.

```
PS C:\WINDOWS\system32> minikube service hello
|-----------|-------|-------------|--------------------------|
| NAMESPACE | NAME  | TARGET PORT |           URL            |
|-----------|-------|-------------|--------------------------|
| default   | hello |          80 | http://192.168.49.2:31746 |
|-----------|-------|-------------|--------------------------|
* Starting tunnel for service hello.
|-----------|-------|-------------|------------------------|
| NAMESPACE | NAME  | TARGET PORT |          URL           |
|-----------|-------|-------------|------------------------|
| default   | hello |             | http://127.0.0.1:14230 |
|-----------|-------|-------------|------------------------|
* Opening service default/hello in default browser...
! Because you are using a Docker driver on windows, the terminal needs to be open to run it.
```


Mani & AK
127.0.0.1:14230
Chat
Introduction To Php...
Best Ethical Hacking...
GitHub - gaiar/anim...
How to Detect Obje...
All Bookmarks
Home
Shop
Blog
Trade-in-offer
Super value deals
On all products
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