



Assignment-10-Docker.

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My Procedure

Step 1: Created a docker file → Dockerfile

1. Pull the prime.sh code from github.
2. Now go to the directory and create a Dockerfile.
3. In the Dockerfile make an ENTRYPOINT for the pomodoro.sh

```
Bash-Scripts > Dockerfile > ...
You, 1 second ago | 1 author (You)
1 FROM ubuntu
2 RUN apt-get update
3 RUN apt-get install -y libnotify-bin
4 WORKDIR /pomodoro
5 COPY . .
6 RUN chmod +x pomodoro.sh
7 ENTRYPOINT [ "./pomodoro.sh" ]
8
```

A Dockerfile under Docker Folder has been Created.

Step 2: Building an image from the Dockerfile

1. Go to the Docker folder.
2. Now the [sudo docker build -t pomodoro-image .] cmd has been run.

Create the image:

```
sakib@The-Silly-Sultan:~/Docker/Bash-Scripts$ sudo docker build -t pomodoro-image .
[+] Building 3.1s (10/10) FINISHED
=> [internal] load build definition from Dockerfile
=> => transferring dockerfile: 173B
=> [internal] load .dockerignore
=> => transferring context: 2B
=> [internal] load metadata for docker.io/library/ubuntu:latest
=> [auth] library/ubuntu:pull token for registry-1.docker.io
=> [1/4] FROM docker.io/library/ubuntu@sha256:aabed3296a3d45cedel1dc866a24476c4d7e093aa806263c27ddaadbce3c1054
=> [internal] load build context
=> => transferring context: 1.86kB
=> CACHED [2/4] RUN apt-get update
=> [3/4] WORKDIR /pomodoro
=> [4/4] COPY pomodoro.sh .
=> exporting to image
=> => exporting layers
=> => writing image sha256:2ba10f1f1fac730cb1ca88530bbc0c47cb0e5d376840b7e2b45e1c688f1de61e
=> => naming to docker.io/library/pomodoro-image
sakib@The-Silly-Sultan:~/Docker/Bash-Scripts$
```

Check the images:

```
sakib@The-Silly-Sultan:~/Docker/Bash-Scripts$ sudo docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
pomodoro-image      latest             2ba10f1f1fac       28 seconds ago     122MB
prime-image         latest             29168fb2629a       2 hours ago        122MB
nodeapp             latest             7ce0d5ce3563       4 hours ago        1.12GB
mongo               latest             9576663f05bb       2 weeks ago        736MB
sakib@The-Silly-Sultan:~/Docker/Bash-Scripts$
```

Step 3: Creating a container from the pomodoro-image

1. sudo docker run -it - --name pomodoro-app pomodoro-image bash
2. sudo docker ps --all → to check the container

Run the container:

```
sakib@The-Silly-Sultan:~/Docker/Bash-Scripts$ sudo docker run -it --name pomodoro-app pomodoro-image bash
Time to walk and rest!
Press any key to continue or Ctrl+C to exit...
Time to get back to work
Press any key to continue or Ctrl+C to exit...
█
```

Container Has been created:

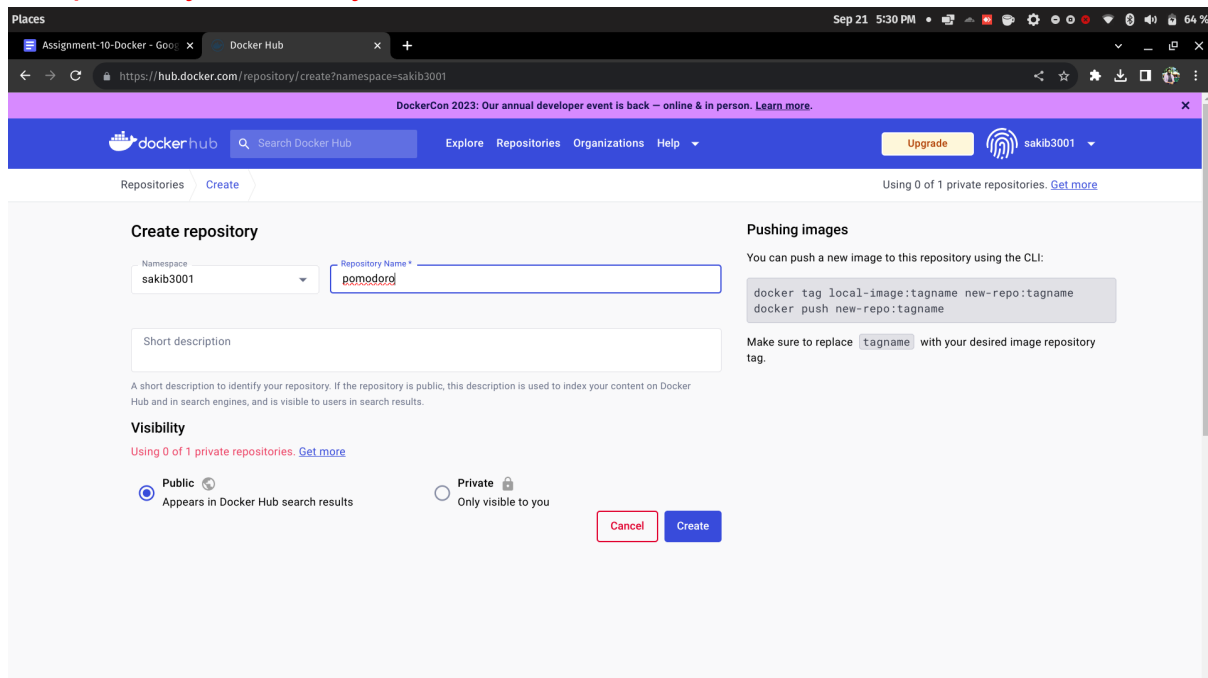
```
sakib@The-Silly-Sultan:~/Docker/Bash-Scripts$ sudo docker ps --all
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS        NAMES
4507e934252a   pomodoro-image  "./pomodoro.sh bash"    35 seconds ago Exited (130)  6 seconds ago           pomodoro-app
7582b4e1f4db   prime-image    "./prime.sh bash"       3 hours ago   Exited (0)    3 hours ago           prime-app
2ada3e389b01   nodeapp        "docker-entrypoint.s..." 4 hours ago   Exited (137)  4 hours ago           app
sakib@The-Silly-Sultan:~/Docker/Bash-Scripts$
```

Step 4: Tagging the pomodoro-image to push into Docker hub.

Existing images:

```
● sakib@The-Silly-Sultan:~/Docker$ docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
pomodoro-image       latest             f56a1331eb50       2 hours ago       172MB
<none>               <none>            4e3fa37ef2bd       4 hours ago       122MB
<none>               <none>            1a871f96436f       4 hours ago       122MB
<none>               <none>            5cd307d810e6       5 hours ago       122MB
prime-image          latest             29168fb2629a       6 hours ago       122MB
nodeapp              latest             7ce0d5ce3563       9 hours ago       1.12GB
mongo                latest             9576663f05bb       2 weeks ago       736MB
○ sakib@The-Silly-Sultan:~/Docker$
```

A repository under my docker hub has been created.



Tagging the pomodoro-image to a docker repo:

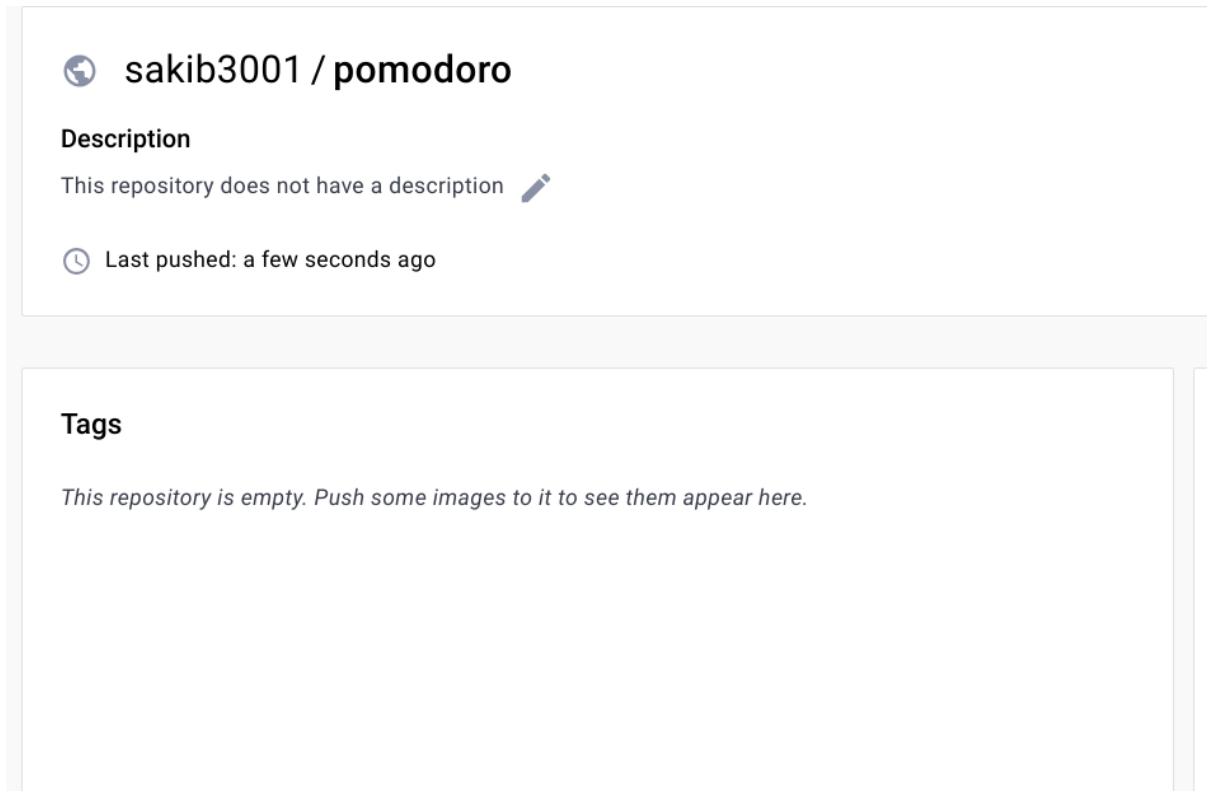
```
● sakib@The-Silly-Sultan:~/Docker$ docker tag pomodoro-image:latest sakib3001/pomodoro:latest
```

Tag has been created:

```
● sakib@The-Silly-Sultan:~/Docker$ docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
pomodoro-image       latest             f56a1331eb50       3 hours ago       172MB
sakib3001/pomodoro   latest             f56a1331eb50       3 hours ago       172MB
<none>               <none>            4e3fa37ef2bd       4 hours ago       122MB
<none>               <none>            1a871f96436f       4 hours ago       122MB
<none>               <none>            5cd307d810e6       5 hours ago       122MB
prime-image          latest             29168fb2629a       6 hours ago       122MB
nodeapp              latest             7ce0d5ce3563       9 hours ago       1.12GB
mongo                latest             9576663f05bb       2 weeks ago       736MB
```

Step 5: Pushing the pomodoro-image to push into Docker hub.

Empty repository:



Pushing the image to the docker hub

Login into docker:

```
sakib@The-Silly-Sultan:~/Docker$ docker login -u sakib3001
Password:
WARNING! Your password will be stored unencrypted in /home/sakib/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store


Login Succeeded

Logging in with your password grants your terminal complete access to your account.
For better security, log in with a limited-privilege personal access token. Learn more at
s-tokens/
sakib@The-Silly-Sultan:~/Docker$
```


Push the image:


```
● sakib@The-Silly-Sultan:~/Docker$ docker push sakib3001/pomodoro:latest
The push refers to repository [docker.io/sakib3001/pomodoro]
d4203b8fe113: Pushed
a80d716f2bce: Pushed
002b1f64ce9c: Pushed
ff1a18276388: Pushed
c83cc4e55aa4: Pushed
dc0585a4b8b7: Mounted from library/ubuntu
latest: digest: sha256:b77f4774457e217da48fde339f2283ff7c08386feed8a05aaf3524e0051c8f21 size: 1575
○ sakib@The-Silly-Sultan:~/Docker$
```

Successfully Pushed:

 sakib3001 / pomodoro



Description

This repository does not have a description 

 Last pushed: 2 minutes ago

Tags

This repository contains 1 tag(s).

Tag	OS	Type	Pulled	Pushed
 latest		Image	---	2 minutes ago

[See all](#)

[Go to Advanced Image Management](#)

Step 6: Pull the pomodoro-image from Docker hub and run it.

Image Pulled:

```
● sakib@The-Silly-Sultan:~/Docker$ docker pull sakib3001/pomodoro
Using default tag: latest
latest: Pulling from sakib3001/pomodoro
445a6a12be2b: Already exists
73e597b91ec7: Already exists
5a5667aa581b: Already exists
dbaf257afaf7: Already exists
9b20316f8225: Already exists
a0d5860fba94: Already exists
Digest: sha256:b77f4774457e217da48fde339f2283ff7c08386feed8a05aaf3524e0051c8f21
Status: Downloaded newer image for sakib3001/pomodoro:latest
docker.io/sakib3001/pomodoro:latest
```

Pomodoro app is running:

```
sakib@The-Silly-Sultan:~/Docker$  
sakib@The-Silly-Sultan:~/Docker$ docker run -it --name app-pomodoro sakib3001/pomodoro  
00:24:514:54
```

Thanks
End of the Assignment.