EXPERIMENT 5

AIM: Working with Dockerfile to Build and Push Docker Image

Steps to Complete:

1. Create following Dockerfile

FROM alpine
MAINTAINER SUDIPT
RUN apk update
RUN apk add nodejs
RUN mkdir /app
COPY index.js /app
WORKDIR /app
RUN node index.js

```
Dockerfile X

Is index.js

Exp5 > → Dockerfile

FROM alpine

MAINTAINER SUDIPT

RUN apk update

RUN apk add nodejs

RUN mkdir /app

COPY index.js /app

WORKDIR /app

RUN node index.js

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By index.js

App

By RUN node index.js

Page 10

By index.js

By I
```

2. Now we have dockerized the app, we will Build image from Dockerfile.

```
PS C:\Users\manya\OneDrive\Desktop\ACO\Exp5> docker build -t myimage:0.1 .

[+] Building 56.3s (12/12) FINISHED

>> [internal] load .dockerignore

=> > transferring context: 2B

>> [internal] load build definition from Dockerfile

=> > transferring dockerfile: 187B

=> [internal] load metadata for docker.io/library/alpine:latest

>> CACHED [1/7] FROM docker.io/library/alpine

=> [internal] load build context

=> > transferring context: 29B

>> [2/7] RUN apk update

=> [3/7] RUN apk update

>> [3/7] RUN mkdir /app

>> [5/7] COPY index.js /app

>> [6/7] WORKDIR /app

>> [7/7] RUN node index.js

=> exporting to image

>> exporting to image

>> writing image sha256:bf00d84eec77f83b7f61511e41e4ba6d885711eb2f61e463249470bf531d75c2

=> = naming to docker.io/library/myimage:0.1

What's Next?

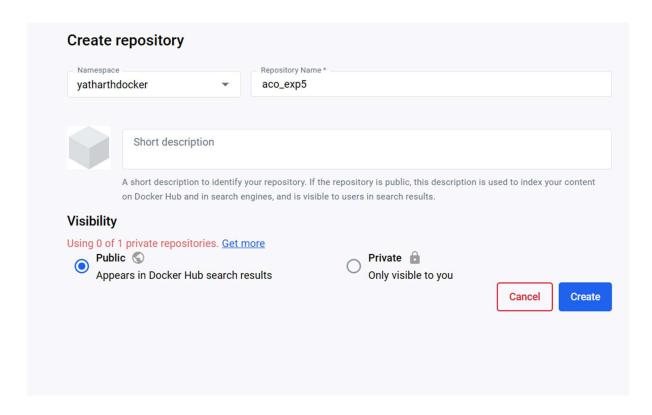
View a summary of image vulnerabilities and recommendations → docker scout quickview
```

3. Create account on Dockerhub and create a repository in it.



Repositories Starred Contributed

Displaying 1 to 2 repositories



4. Tag the recently created image using following command.

```
docker tag imageID Repositoryname

katacoua/redis-node-docker-example latest e049T27De288 / years ago 35.4MB

PS C:\Users\manya\OneDrive\Desktop\ACO\Exp5> docker tag bf00d84eec77 yatharthdocker/aco_exp5

PS C:\Users\manya\OneDrive\Desktop\ACO\Exp5>
```

5. Login to Dockerhub from console using following command.

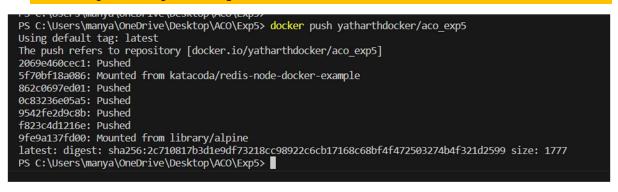
docker Login

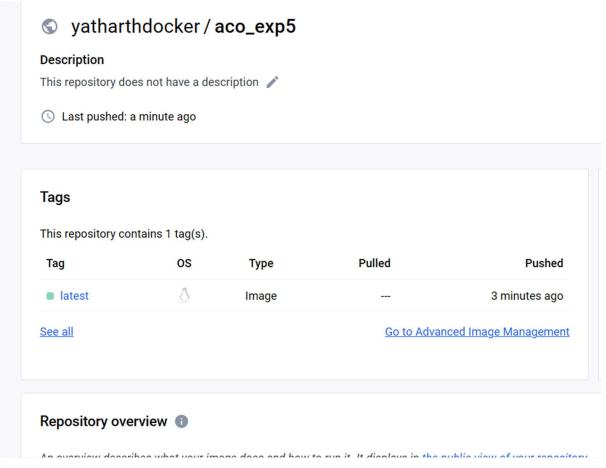
```
PS C:\Users\manya\OneDrive\Desktop\ACO\Exp5> docker login
Log in with your Docker ID or email address to push and pull images from Docker Hub. If you don't have a Docker ID, head over to https://hub.docker.
com/ to create one.
You can log in with your password or a Personal Access Token (PAT). Using a limited-scope PAT grants better security and is required for organizatio
ns using SSO. Learn more at https://docs.docker.com/go/access-tokens/

Username: yatharthdocker
Password:
Login Succeeded
PS C:\Users\manya\OneDrive\Desktop\ACO\Exp5>
PS C:\Users\manya\OneDrive\Desktop\ACO\Exp5>
PS C:\Users\manya\OneDrive\Desktop\ACO\Exp5>
```

6. Now push the image on Dockerhub using following command.

docker push Repositoryname





7. Pull and Run the container of your deployed image on docker hub.

