EXPERIMENT 5

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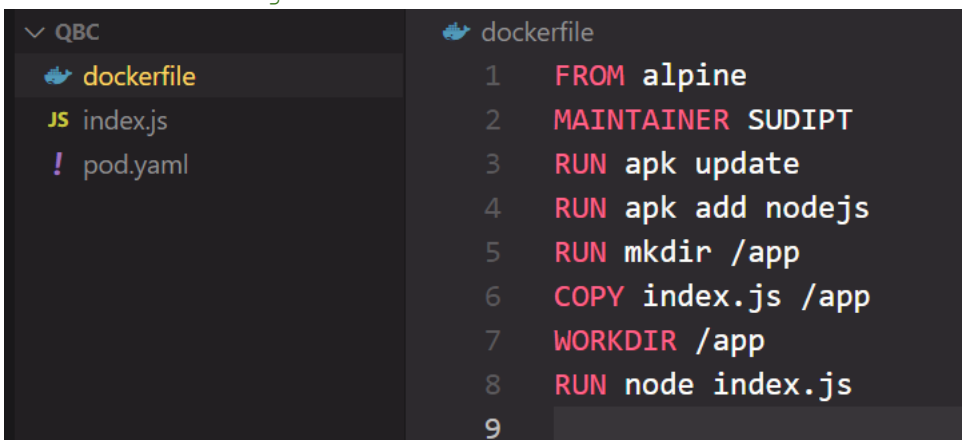
Batch b4

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
```

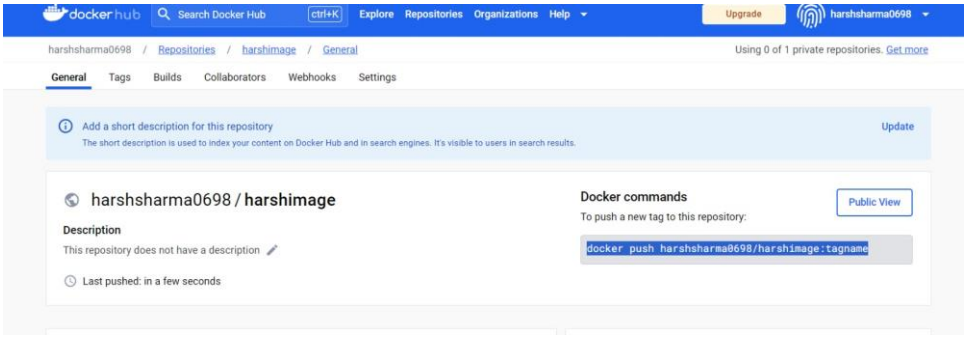


2. Now we have dockerized the app, we will Build image from Dockerfile.

```
docker build -t myimage:0.1 .
```

```
PS C:\Users\sharm\OneDrive\Desktop\LC\lab_docker> docker buildx build -t myimage:0.1 .\  # Use backslash for path
>>
[+] Building 17.8s (13/13) FINISHED                                                                    docker:default
 => [internal] load .dockerignore                                                                              0.0s
 => => transferring context: 2B                                                                                0.0s
 => [internal] load build definition from dockerfile                                                           0.0s
 => => transferring dockerfile: 188B                                                                           0.0s
 => [internal] load metadata for docker.io/library/alpine:latest                                               5.0s
 => [auth] library/alpine:pull token for registry-1.docker.io                                                  0.0s
 => [1/7] FROM docker.io/library/alpine@sha256:34871e7290500828b39e22294660bee86d966bc0017544e848dd9a255cdf59e0  1.2s
 => => resolve docker.io/library/alpine@sha256:34871e7290500828b39e22294660bee86d966bc0017544e848dd9a255cdf59e0  0.0s
 => => sha256:34871e7290500828b39e22294660bee86d966bc0017544e848dd9a255cdf59e0 1.64kB / 1.64kB                 0.0s
 => => sha256:d695c3de6fcd8cfe3a6222b0358425d40adfd129a8a47c3416faff1a8aece389 528B / 528B                     0.0s
 => => sha256:b541f2080109ab7b6bf2c06b28184fb750cdd17836c809211127717f48809858 1.47kB / 1.47kB                 0.0s
 => => sha256:c926b61bad3b94ae7351bafd0c184c159ebf0643b085f7ef1d47ecdc7316833c 3.40MB / 3.40MB                 0.9s
 => => extracting sha256:c926b61bad3b94ae7351bafd0c184c159ebf0643b085f7ef1d47ecdc7316833c                       0.1s
 => [internal] load build context                                                                              0.0s
 => => transferring context: 29B                                                                               0.0s
 => [2/7] RUN apk update                                                                                       1.4s
 => [3/7] RUN apk add nodejs                                                                                   8.6s
 => [4/7] RUN mkdir /app                                                                                       0.5s
 => [5/7] COPY index.js /app                                                                                   0.0s
 => [6/7] WORKDIR /app                                                                                         0.0s
 => [7/7] RUN node index.js                                                                                    0.6s
 => exporting to image                                                                                         0.3s
 => => exporting layers                                                                                        0.3s
 => => writing image sha256:207986a95b8e3a5cf6127380aa04d42942a2a95c31a589a204eb49f104767d5b                   0.0s
 => => naming to docker.io/library/myimage:0.1                                                                 0.0s
PS C:\Users\sharm\OneDrive\Desktop\LC\lab_docker>
```

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



4. Tag the recently created image using following command.

```
docker tag imageID Repositoryname
```

```
PS F:\dockerlab> docker run -d harsh8787/myimage:1.0.0
```

5. Login to Dockerhub from console using following command.

```
docker Login
```

```
PS F:\dockerlab> docker login
Authenticating with existing credentials...
Login Succeeded
```

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

```
docker push Repositoryname
```

```
PS C:\Users\sharm\OneDrive\Desktop\LC\lab_docker> docker push harshsharma0698/harshimage:0.1
The push refers to repository [docker.io/harshsharma0698/harshimage]
a09726e1d8a9: Preparing
5f70bf18a086: Preparing
7bebb7564222: Preparing
5c5cf2a483d5: Preparing
1c475982f1f1: Preparing
22ac253c35a0: Waiting
9fe9a137fd00: Waiting
```

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

```
Docker run -d image_name
```

```
b0b7cc38f41f79d84db18879f499e16673bbb5b277a9023b000d1af7fa398cb0
```