

EXPERIMENT 5

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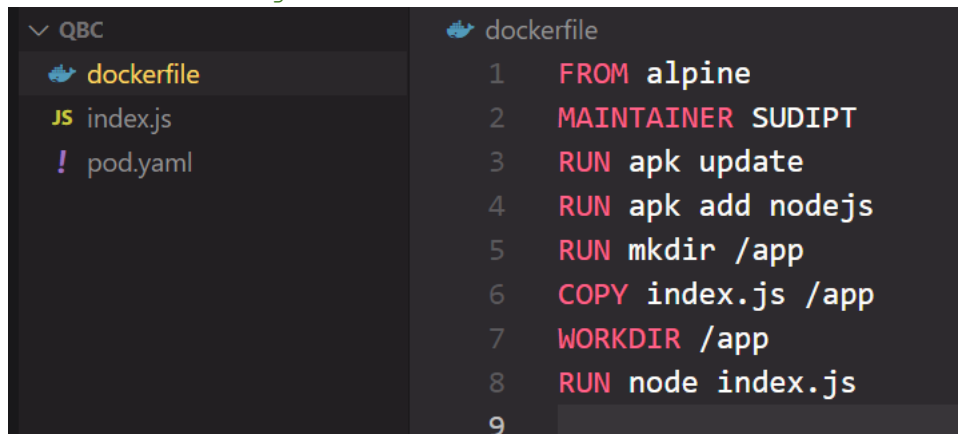
Batch b4

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 .
```

```
Executing task: docker build --pull --rm -f "Dockerfile" -t dockerlab:latest "."

[+] Building 8.0s (12/12) FINISHED
=> [internal] load build definition from Dockerfile
=> => transferring dockerfile: 183B
=> [internal] load .dockerignore
=> => transferring context: 2B
=> [internal] load metadata for docker.io/library/alpine:latest
=> [1/7] FROM docker.io/library/alpine@sha256:34871e7290500828b39e22294660bee86d966bc0017544e848dd9a255cdf59e0
=> => resolve docker.io/library/alpine@sha256:34871e7290500828b39e22294660bee86d966bc0017544e848dd9a255cdf59e0
=> => sha256:34871e7290500828b39e22294660bee86d966bc0017544e848dd9a255cdf59e0 1.64kB / 1.64kB
=> => sha256:d695c3de6fcd8cfe3a6222b0358425d40adfd129a8a47c3416aff1a8aece389 528B / 528B
=> => sha256:b541f2080109ab7b6bf2c06b28184fb750cdd17836c809211127717f48809858 1.47kB / 1.47kB
=> => sha256:c926b61bad3b94ae7351bafd0c184c159ebf0643b085f7ef1d47ecdc7316833c 3.40MB / 3.40MB
=> => extracting sha256:c926b61bad3b94ae7351bafd0c184c159ebf0643b085f7ef1d47ecdc7316833c
=> [internal] load build context
=> => transferring context: 29B
=> [2/7] RUN apk update
=> [3/7] RUN apk add nodejs
=> [4/7] RUN mkdir /app
=> [5/7] COPY index.js /app
=> [6/7] WORKDIR /app
=> [7/7] RUN node index.js
=> exporting to image
=> => exporting layers
=> => writing image sha256:109e8aa75d580f499cdac16ce08f6468ef946d05a2f1e9e4df54a6798e376fa
=> => naming to docker.io/library/dockerlab:latest
```

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

sudhanshu87 / [Repositories](#) / [myimage](#) / [General](#)
Using 0 of 1 private repositories. [Get more](#)

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Add a short description for this repository Update

The short description is used to index your content on Docker Hub and in search engines. It's visible to users in search results.

sudhanshu87 / myimage

Description
This repository does not have a description

Last pushed: a few seconds ago

Docker commands
To push a new tag to this repository:

```
docker push sudhanshu87/myimage:tagname
```

[Public View](#)

4. Tag the recently created image using following command.

```
docker tag imageID Repositoryname
```

```
PS F:\dockerlab> docker tag sudhanshu87/myimage:1.0.0 sudhanshu87/myimage:latest
```

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 F:\dockerlab> docker push sudhanshu87/myimage:1.0.0  
The push refers to repository [docker.io/sudhanshu87/myimage]  
2216ed653644: Pushed  
5f70bf18a086: Mounted from katacoda/redis-node-docker-example  
c395fc626165: Pushed  
10795eff3909: Pushed  
81d47d0e76e8: Pushed  
b05d22b94890: Pushed  
cc2447e1835a: Mounted from library/alpine  
1.0.0: digest: sha256:c05cbb54a205fc225b5f1342edd08a1b1dec36de2acb82045be81617a57fe9bd size: 1777  
PS F:\dockerlab>
```

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

```
Docker run -d image_name
```

```
PS F:\dockerlab> docker pull sudhanshu87/myimage:1.0.0  
1.0.0: Pulling from sudhanshu87/myimage  
Digest: sha256:c05cbb54a205fc225b5f1342edd08a1b1dec36de2acb82045be81617a57fe9bd  
Status: Image is up to date for sudhanshu87/myimage:1.0.0  
docker.io/sudhanshu87/myimage:1.0.0
```

```
PS F:\dockerlab> docker run -d sudhanshu87/myimage:1.0.0  
b0b7cc38f41f79d84db18879f499e16673bbb5b277a9023b000d1af7fa398cb0
```