

Assignment: IV

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1.1 1B

Dockerising Apache Web-Server

Create a working directory .

Now create an in.html file with the content given in question in the same directory:
the content is as follows

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Hello World!</title>
</head>
<body>
  <h1>Learning Docker...</h1>
</body>
</html>
```

Create a Dockerfile file with the following content in the same directory

```
FROM httpd:latest
WORKDIR /Users/shubham gupta/Desktop
ARG DEBIAN_FRONTEND=noninteractive
ENV TZ=Indian
RUN apt-get -y update
RUN apt-get install -y apache2
EXPOSE 80
COPY in.html /var/www/html/in.html
CMD [ "/usr/sbin/apache2ctl", "-D", "FOREGROUND" ]
```

DEBIAN_FRONTEND and the environment variable TZ are used in passing the arguments of tzdata while installing apache2.

Now run the following commands in the terminal:

->docker pull httpd:latest

->docker build -t apache_webserver .

```

C:\Users\shubham gupta\Desktop>docker pull httpd:latest
latest: Pulling from library/httpd
Digest: sha256:fddc534b7f6bb6197855be559244adb11907d569aae1283db8e6ce8bb8f6f456
Status: Image is up to date for httpd:latest
docker.io/library/httpd:latest

C:\Users\shubham gupta\Desktop>docker build -t apache_webserver .
[+] Building 78.2s (10/10) FINISHED
=> [internal] load .dockerignore
=> => transferring context: 2B
=> [internal] load build definition from Dockerfile
=> => transferring dockerfile: 32B
=> [internal] load metadata for docker.io/library/httpd:latest
=> [1/5] FROM docker.io/library/httpd:latest
=> [internal] load build context
=> => transferring context: 29B
=> CACHED [2/5] WORKDIR /Users/shubham gupta/Desktop
=> CACHED [3/5] RUN apt-get -y update
=> [4/5] RUN apt-get install -y apache2
=> [5/5] COPY in.html /var/www/html/in.html
=> exporting to image
=> => exporting layers
=> => writing image sha256:9e3a1a0f983dd1919b4f9a51b6dbf5c846ef6d64dcacf2df0e19a462ea8cf048
=> => naming to docker.io/library/apache_webserver

```

```

->docker run -p 80:80 -dit --name apache_test apache_with_docker
->docker ps

```

It should be showing that the container is running in the following way:
 docker ps is the essential command to list existing docker containers.

```

C:\Users\shubham gupta>cd desktop
C:\Users\shubham gupta\Desktop>docker ps

```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
39e81182fd82	apache_webserver	"/usr/sbin/apache2ct..."	2 hours ago	Up About an hour	0.0.0.0:80->80/tcp	apache_with_docker

```

C:\Users\shubham gupta\Desktop>

```

Now running localhost:80 on the browser we get the following html page running



Learning Docker...

To push the docker image to the public dockerhub repo created we used the following commands

```

C:\Users\shubham gupta\Desktop>docker tag apache_webserver shubhamgupta11941140/apacheserver

```

```
C:\Users\shubham gupta\Desktop>docker push shubhamgupta11941140/apacheserver
The push refers to repository [docker.io/shubhamgupta11941140/apacheserver]
3855a404d6b3: Pushed
266da4242141: Pushed
47e96f8dda72: Pushed
7095bb2067ca: Pushed
c74375f55aa8: Mounted from library/httpd
211b9be55a20: Mounted from library/httpd
aa0b3e4b6d3b: Mounted from library/httpd
540171a10c83: Mounted from library/httpd
f5600c6330da: Mounted from shubhamgupta11941140/q1try
latest: digest: sha256:3afb247c77574422f4abf9085765369bb13b1858b0aeae7d21030de2c375f9a9 size: 2204
```