

## Module-3: Docker – I Assignment – 5

You have been asked to:

- Create a sample HTML file
- Use the Dockerfile from the previous task
- Replace this sample HTML file inside the docker container with the default page

### Solution:

- 1) **Navigate to the directory containing your Dockerfile in the previous assignment**

```
ubuntu@ip-172-31-10-158:~/my-docker-project$ nano Dockerfile
ubuntu@ip-172-31-10-158:~/my-docker-project$ ll
total 12
drwxrwxr-x 2 ubuntu ubuntu 4096 Feb  9 17:32 ./
drwxr-x--- 6 ubuntu ubuntu 4096 Feb  9 17:30 ../
-rw-rw-r-- 1 ubuntu ubuntu  357 Feb  9 17:32 Dockerfile
```

- 2) **Create index.html** in the same directory as my Dockerfile: nano index.html

```
<!DOCTYPE html>
<html>
<head>
  <title>Sample Page</title>
</head>
<body>
  <h1>Welcome to My Sample Page</h1>
  <p>This is a sample HTML file.</p>
</body>
</html>
```

```
<!DOCTYPE html>
<html>
<head>
  <title>Sample Page</title>
</head>
<body>
  <h1>Welcome to My Sample Page</h1>
  <p>This is a sample HTML file.</p>
</body>
</html>
```

```
^G Help      ^O Write Out  ^W Where Is   ^K Cut        ^T Execute    ^C Location   M-U
^X Exits     ^B B^R Read File ^\ Replace    ^U Paste      ^J Justify    ^/ Go To Line M-E
Next
```

```

ubuntu@ip-172-31-10-158:~/my-docker-project$ ll
total 16
drwxrwxr-x 2 ubuntu ubuntu 4096 Feb  9 17:42 ./
drwxr-x--- 6 ubuntu ubuntu 4096 Feb  9 17:30 ../
-rw-rw-r-- 1 ubuntu ubuntu  357 Feb  9 17:32 Dockerfile
-rw-rw-r-- 1 ubuntu ubuntu  170 Feb  9 17:42 index.html
ubuntu@ip-172-31-10-158:~/my-docker-project$

```

- 3) **Build the Docker Image:** `docker build -t my-apache-sample .` The `-t` option tags the image with a name.

```

ubuntu@ip-172-31-10-158:~/my-docker-project$ docker build -t my-apache-sample .
DEPRECATED: The legacy builder is deprecated and will be removed in a future release.
            Install the buildx component to build images with BuildKit:
            https://docs.docker.com/go/buildx/

Sending build context to Docker daemon  3.072kB
Step 1/5 : FROM ubuntu:latest
latest: Pulling from library/ubuntu
6a7813e071bf: Pull complete
Digest: sha256:72297848456d5d37d1262630108ab308d3e9ec7ed1c3286a32fe09856619a782
Status: Downloaded newer image for ubuntu:latest
--> a04dc4851cbc
Step 2/5 : RUN apt-get update && apt-get install -y apache2
--> Running in 6a7eb0228d90
Get:1 http://archive.ubuntu.com/ubuntu noble InRelease [256 kB]
Get:2 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Get:3 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Packages [15.5 kB]
Get:4 http://archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:5 http://archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Get:6 http://security.ubuntu.com/ubuntu noble-security/main amd64 Packages [777 kB]
Get:7 http://archive.ubuntu.com/ubuntu noble/universe amd64 Packages [19.3 MB]
Get:8 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Packages [789 kB]
Get:9 http://archive.ubuntu.com/ubuntu noble/main amd64 Packages [13.0 MB]
Get:10 http://archive.ubuntu.com/ubuntu noble/multiverse amd64 Packages [15.5 kB]
Get:11 http://archive.ubuntu.com/ubuntu noble/universe amd64 Packages [19.3 MB]
Get:12 http://archive.ubuntu.com/ubuntu noble/restricted amd64 Packages [789 kB]
Fetched 100 MB in 10s (10.0 MB/s)
Reading package lists...
Building dependency tree...
Reading state information...
Calculating upgrade...
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
Enabling module reqtimeout.
Enabling conf charset.
Enabling conf localized-error-pages.
Enabling conf other-vhosts-access-log.
Enabling conf security.
Enabling conf serve-cgi-bin.
Enabling site 000-default.
invoke-rc.d: could not determine current runlevel
invoke-rc.d: policy-rc.d denied execution of start.
Processing triggers for libc-bin (2.39-0ubuntu8.3) ...
Processing triggers for ca-certificates (20240203) ...
Updating certificates in /etc/ssl/certs...
0 added, 0 removed; done.
Running hooks in /etc/ca-certificates/update.d...
done.
--> Removed intermediate container 6a7eb0228d90
--> d7c6b4c062e9
Step 3/5 : COPY index.html /var/www/html/index.html
--> 989a55cacbd7
Step 4/5 : CMD ["apache2ctl", "-D", "FOREGROUND"]
--> Running in fac037af2fcd
--> Removed intermediate container fac037af2fcd
--> 9b62d3d136dc
Step 5/5 : EXPOSE 80
--> Running in 5396dba33d55
--> Removed intermediate container 5396dba33d55
--> 90356d0cf184
Successfully built 90356d0cf184
Successfully tagged my-apache-sample:latest
ubuntu@ip-172-31-10-158:~/my-docker-project$

```

- 4) Once the image is built, **run a container from it and map the port:**  
`docker run -d -p 80:80 --name my-apache-container my-apache-sample`

```
ubuntu@ip-172-31-10-158:~/my-docker-project$ docker run -d -p 80:80 --name my-apache-container my-apache-sample
8e15d94d9bf1a0e5df06e1616a725fcb9a53136df4051ddbefc0d4f8913b1c77
ubuntu@ip-172-31-10-158:~/my-docker-project$
```

- 5) Open your web browser and navigate to `http://localhost` (or `http://<your-server-ip>`)

