

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

This task can be done as shown below

```
root@MTLP-1751:~# sudo nano DockerFile
```

We need to made changes to dockerfile as shown below

```
GNU nano 6.2 Dockerfile
# Use the official Ubuntu base image
FROM ubuntu:latest

# Install Apache2
RUN apt-get update && \
    apt-get install -y apache2 && \
    apt-get clean && \
    rm -rf /var/lib/apt/lists/*

# Copy the sample HTML file into the container
COPY index.html /var/www/html/

# Automatically start Apache2 when the container starts
CMD ["apache2ctl", "-D", "FOREGROUND"]

# Expose port 80 to the outside world
EXPOSE 80
```

We need to create index.html file with having code as follows

```
GNU nano 6.2 index.html
<!DOCTYPE html>
<html>
<head>
  <title>My Dockerized Apache2 Web App</title>
</head>
<body>
  <h1>Hello, Docker!</h1>
  <p>This is a sample HTML file running on Apache2 inside a Docker container.</p>
</body>
</html>
```

Then build docker image and run the same by using port number given

```
root@HTLP-1751:~# sudo nano Dockerfile
root@HTLP-1751:~# sudo nano index.html
root@HTLP-1751:~# sudo docker build . -t test02
[+] Building 0.7s (8/8) FINISHED
=> [internal] load build definition from Dockerfile
=> => transferring dockerfile: 454B
=> [internal] load .dockerignore
=> => transferring context: 2B
=> [internal] load metadata for docker.io/library/ubuntu:latest
=> [1/3] FROM docker.io/library/ubuntu:latest
=> [internal] load build context
=> => transferring context: 261B
=> CACHED [2/3] RUN apt-get update && apt-get install -y apache2 && apt-get clean && rm -rf /var/lib/apt/lists/*
=> [3/3] COPY index.html /var/www/html/
=> exporting to image
=> => exporting layers
=> => writing image sha256:aa3b3b3c3a2334c265397f937aa62b2ea400843351a84ddd78dc1ccdc9c9277
=> => naming to docker.io/library/test02
root@HTLP-1751:~# sudo docker run -itd -p 80:80 test02
a9839e5b17aab806c5f0889f51cdfc12ce9a98e1335c4aeb1a32c9d4fd52c857
docker: Error response from daemon: driver failed programming external connectivity on endpoint nice_faraday (8cad98274e43b609e8685384359c01f862a963b11f5): Bind for 0.0.0.0:80 failed: port is already allocated.
root@HTLP-1751:~# sudo docker run -itd -p 80:80 test01
0ed2eb14e21f5e68ad41179796aa08e0cd28234b277dc21f242928757149381c
docker: Error response from daemon: driver failed programming external connectivity on endpoint great_allen (46894a174e2a4e1c6ac798587c852678dbd0055f9a8): Bind for 0.0.0.0:80 failed: port is already allocated.
root@HTLP-1751:~# sudo docker run -itd -p 81:80 test02
eb574dc9823dde43028c7459a3ade9da4218ce9561052a812f9586b9672ff69c
```

We can successfully achieved the task as follows we can see out custom html code written in place of default apache server page.

