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BATCH: DEVOPS B2		

Lab Exercise 4- Building a Docker Image for an HTML App Using Nginx

1. Setup

You will need:

- Docker installed on your machine.
- A simple HTML file for the app.

2. Step 1: Create the HTML File

Create a directory for your HTML app and place an index.html file in it.

```
mkdir nginx-html-app  
  
cd nginx-html-app
```

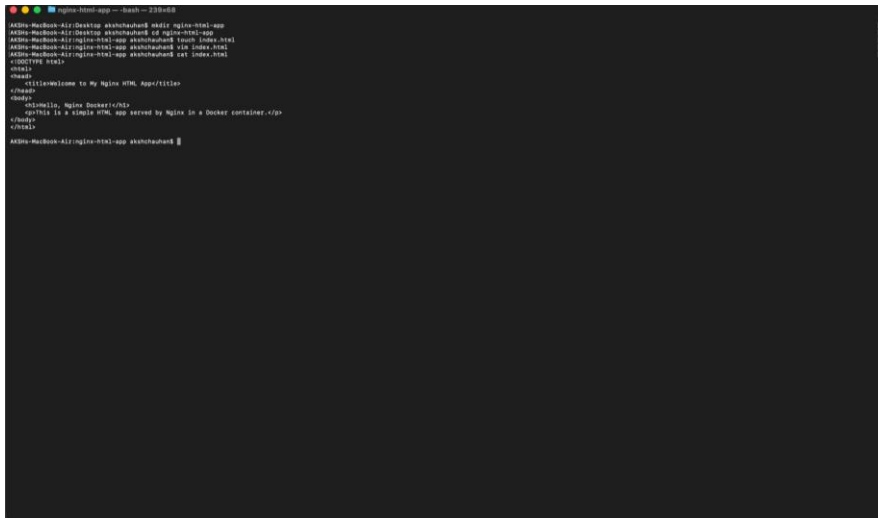
Inside the nginx-html-app directory, create the HTML file.

```
touch index.html
```

Edit the index.html file with the following content (or any custom HTML content you want):

```
<!DOCTYPE html>  
<html>  
<head>  
  <title>Welcome to My Nginx HTML App</title>  
</head>  
<body>
```

```
<h1>Hello, Nginx Docker!</h1>
<p>This is a simple HTML app served by Nginx in a Docker container.</p>
</body>
</html>
```

A terminal window with a dark background and light text. The prompt is 'nginx-html-app ~\$'. The user has entered 'cat index.html'. The output shows the HTML content: 'Welcome to my Nginx HTML App/Title', 'Hello, Nginx Docker!', and 'This is a simple HTML app served by Nginx in a Docker container.'

3. Step 2: Create a Dockerfile

In the same directory, create a Dockerfile. This file will define how to build the Docker image using Nginx as the base image.

```
touch Dockerfile
```

Edit the Dockerfile and add the following content:

```
FROM nginx:latest
COPY index.html /usr/share/nginx/html/
EXPOSE 80
```

4. Step 3: Build the Docker Image

Now that you have the Dockerfile and index.html, it's time to build the Docker image.

Run the following command to build the image, giving it a tag (e.g., `nginx-html-app`):

```
docker build -t nginx-html-app .
```

Docker will use the Nginx base image, copy your index.html into the appropriate directory, and build the image.

[illegible]

5. Step 4: Run the Docker Container

After building the image, you can run the container with the following command:

```
docker run -d -p 8006:80 nginx-html-app
```

This command runs the container in detached mode (-d) and maps port 8006 on your host machine to port 80 inside the container, where Nginx is serving your HTML app.

b840c136497597069f5c3ca0205d5fede3156efb2fd52f4cdd91bfd2b58fad03

6. Step 5: Verify

Open a browser and go to `http://localhost:8006`. You should see your HTML page with the message “Hello, Nginx Docker!”.



7. Step 6: Stop and Remove the Container

Once you're done, you can stop and remove the container:

```
docker ps # to see running containers
```

```
docker stop <container-id>
```

```
docker rm <container-id>
```

```
AKSHU-MacBook-Air:nginx-html-app akshuhard$ docker ps
CONTAINER ID   IMAGE     COMMAND                  CREATED    STATUS    PORTS                               NAMES
b84b1364975    nginx:alpine-slim     "/docker-entrypoint.…" About 8 hours ago    Up About 8 hours    0.0.0.0:8006->80/tcp    intelligen_t_millenn
b84b1364975
AKSHU-MacBook-Air:nginx-html-app akshuhard$ docker stop b84b1364975
b84b1364975
AKSHU-MacBook-Air:nginx-html-app akshuhard$ docker rm b84b1364975
b84b1364975
AKSHU-MacBook-Air:nginx-html-app akshuhard$ docker ps
CONTAINER ID   IMAGE     COMMAND                  CREATED    STATUS    PORTS                               NAMES
```