Python-Nginx-server - build steps

1. Create basic HTML with the template from the task.
2. Create my Python application to server the template via connection (best practice for me)
3. Create a Docker file for my py application
   a. had an issue with the path, copy the HTML file directly to app/ directory instead to /usr/share/nginx/html/ so it couldnt fint it and run it within the container
4. Build the container using the command:
   `$docker build -t my-python-server:2.0 .`
5. Run container on port 8080
   `$docker run -p 8080:8080 my-python-server:2.0`
6. Test container.
   a. docker exec -t 1452f38975e0 curl http://localhost:8080/hello -vvv
   b. Got answer.

```
/Users/danielbenharosh
% docker exec -t 1452f38975e0 curl  http://localhost:8080/hello -vvv
*   Trying 127.0.0.1:8080...
* Connected to localhost (127.0.0.1) port 8080 (#0)
> GET /hello HTTP/1.1
> Host: localhost:8080
> User-Agent: curl/7.74.0
> Accept: */*
>
* Mark bundle as not supporting multiuse
< HTTP/1.1 200 OK
< Server: Werkzeug/2.2.3 Python/3.9.16
< Date: Thu, 23 Feb 2023 13:33:23 GMT
< Content-Type: text/html; charset=utf-8
< Content-Length: 174
< Connection: close
<
<!DOCTYPE html>
<html>
  <head>
    <title>My Page</title>
  </head>
  <body>
    <h1>Today is Thursday</h1>
    <p>The current date is 23 February 2023</p>
  </body>
* Closing connection 0
</html>%
/Users/danielbenharosh
```

7. Create a basic Nginx config file that runs on port 80 and listen to localhost:8080(py app)
8. Create and run Nginx container with -v to mount my config.
   a. Command:
   ```
   docker run -p 80:8080 -v
   /host_mnt/Users/danielbenharosh/Documents/Project/Lab/Project_final/nginx
   .conf:/etc/nginx/nginx.conf:rw nginx
   ```
9. test the container and go to http://localhost:8080/hello but nothing appears.

10. Get inside the container and see that the index.html is not there so i added it to the command and rerun the container:

```
$docker run -p 80:8080 -v
<path_to_directory>/Project_final/nginx.conf:/etc/nginx/nginx.conf:rw -v
<path_to_directory>/Project_final/:/usr/share/nginx/html/ nginx
```
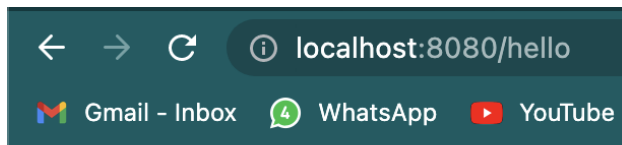
 a. Tried again but with no luck again:
  i. Test the application and got a response from inside the container but I still can't reach it through my web.
  ii. Checked for files inside the containers (index.html, ngnix.conf)
  iii. Then I noticed that my application do not open the template in the right place:
   1. Instead, the path that the docker file copy the index.html (/usr/share/nginx/html/index.html)
It was pointing to just index.html and couldn't find the file inside the container.

11. After the above is fixed: Create the docker image from scratch and run it again (same commands above - different tag)
12. Create a Nginx container again to serve my application.
13. Got the template:

Today is Thursday

The current date is 23 February 2023

1.