

# Deploy Nginx WebApp Project

Install the Nginx webserver:

Apt-get install nginx

Checking the status of the Nginx server whether it is running or not

Systemctl status nginx

Path of nginx webpage

var/www/html

To check the main file of the nginx path:

etc/nginx -> nginx.conf (This is the nginx configuration file its like a configuration manual of nginx)

Today in this project we will work on the default file "sites-enabled"

So, now we are making our HTML file in the path "var/www/html" as in the sites-enabled i have seen that the file which is in the above path will run when we try to access the web server on the browser.

We will update the below html code inside the path "var/www/html"

Create the file harshit.html

Update the html code just for testing.

<h2>This is the html page which is under the task file folder</h2>

Run on the browser : IP:80 (80 is the default port of nginx)

Now we are going to build the project deploying the sample app of django.

Clone the git repository to work on the project.

git clone <https://github.com/LondheShubham153/django-notes-app.git>

Inside the above directory we have the below directories:

Dockerfile README.md db.sqlite3 manage.py notesapp requirements.txt

Jenkinsfile api docker-compose.yml mynotes profile staticfiles

Install the docker with the below command:

Apt-get install docker.io

I was confusing about the difference between the docker.io and docker. Like if we run the command with docker.io or with docker only what is the impact in the package so i got the below information....

—The docker.io package is the Docker containerization software; whereas, the docker package is a tray plugin for docking applications to the desktop UI.

We will see the docker is working or not with "docker ps"

As i'm using the root user so i don't having this error but if any new user without login as a root they got the permission denied error on that time they need to perform the below action plan:

```
sudo usermod -aG docker devops
```

usermod (user modification)

-aG (append group)

devops (it is the user )

Also we can refer the below link:

<https://stacktuts.com/got-permission-denied-while-trying-to-connect-to-the-docker-daemon-socket-at-unix-var-run-docker-sock-get-http-2fvar-2frun-2fdocker-sock-v1-24-version-dial-unix-var-run-docker-sock-connect-permission-denied>

Now we are building the image with the docker file which is in the above github repository with the below command:

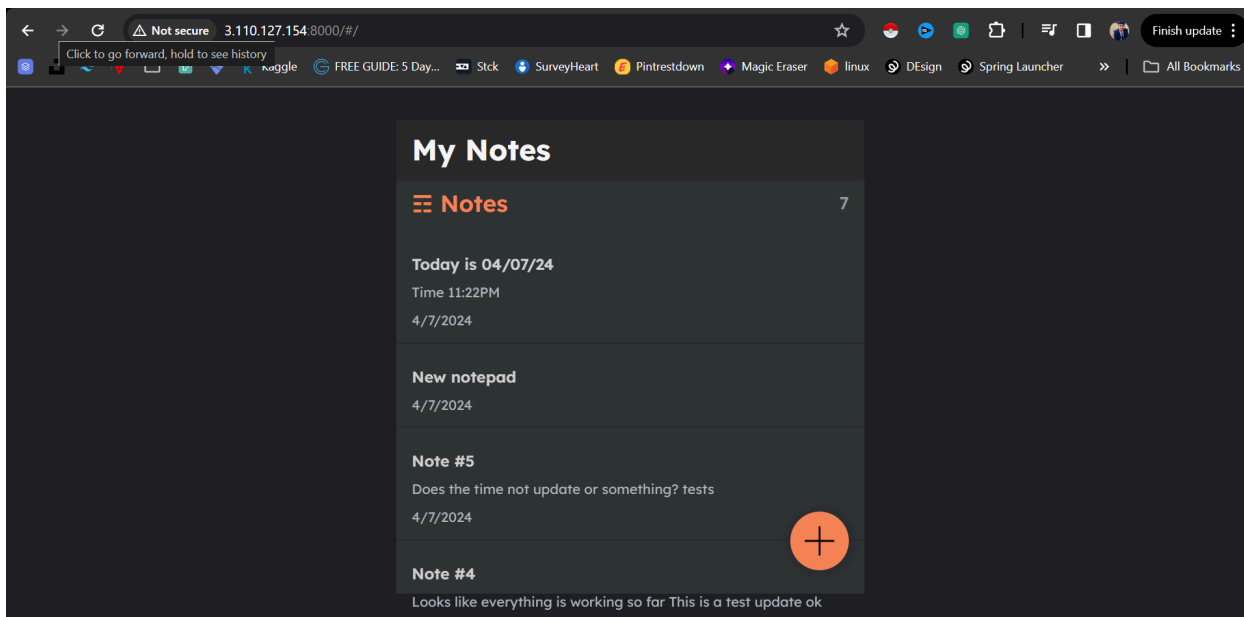
```
docker build -t notes-app .
```

To build the container use the below command:

```
docker run -d -p 8000:8000 notes-app:latest
```

As we update the Port 8000 now if we want to see our Django application run the IP:8000

As if now it was looking like this :



We can update anything and save the details also.

-----Till now we created the image, container and run the application-----

Now our server is running on : 3.110.127.154:8000

We can see this by the below command:

```
curl -L http://3.110.127.154:8000
```

By this project i got the understanding how to deploy the website with the devops containers.

=====END=====