

Dockerfile Documentation

This guide provides an explanation and usage instructions for the provided Dockerfile, which is designed to create a lightweight web application image using NGINX.

Steps :

1. Create a dockerfile

Dockerfile

```
# Use NGINX as the base image
FROM nginx:latest

# Set the working directory
WORKDIR /usr/share/nginx/html

# Copy the static HTML content to the NGINX root directory
COPY index.html .

# Expose the default HTTP port
EXPOSE 80

# Run NGINX
CMD ["nginx", "-g", "daemon off;"]
```

2. Building the Docker Image

- Navigate to the directory containing the Dockerfile and index.html file.

```
cd kubernetes-deployment-files
```

- Build the Docker image:

```
docker build -t static-webapp:latest .
```

3. Running the Docker Container

- Run the container:

```
docker run -d -p 80:80 static-webapp:latest
# This maps port 80 on the host machine to port 80 in the container.
```

4. Access the application in your browser:

<http://localhost:80>

5. Pushing the Image to a Repository

- Tag the image

```
docker tag static-webapp:latest chittimallanikhil:web-app:latest
```

- Login in to the DockerHub

```
docker login  
# login with the credentials of the Docker Hub
```

- Push the image to Docker Hub:

```
docker push chittimallanikhil:web-app:latest
```