

Lab 2 - Your first docker images

Create a transitive image

Tips

- Use the `docker commit`

Make our image

1. Run `nginx` image detached with param `-p 80:80` named `mynginx1`

```
docker run -d -p 80:80 --name mynginx1 nginx
```

2. Check that the nginx page (localhost:80)

```
docker ps
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
d8ef6941b446	nginx	"/docker-entrypoint...."	9 seconds ago	Up 8 seconds	0.0.0.0:80->80/tcp, [::]:80->80/tcp	mynginx1

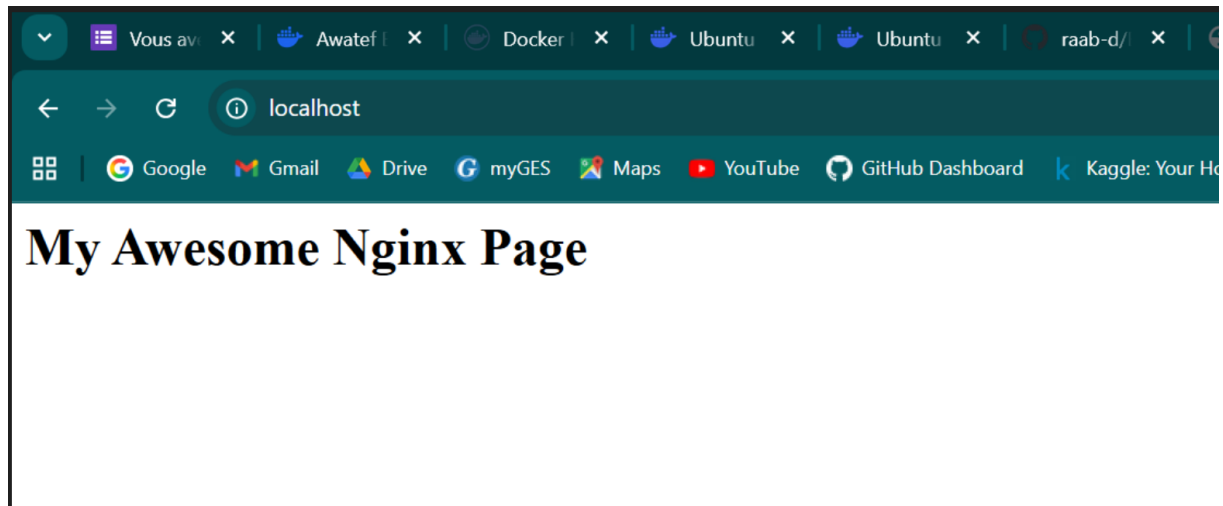
3. Run a shell without stopping the Container

```
docker exec -it mynginx1 /bin/bash
```

4. Update the file `/usr/share/nginx/html/index.html` in the container

```
echo "<h1>My Awesome Nginx Page</h1>" > /usr/share/nginx/html/index.html
```

5. Check that the nginx page has been updated (localhost:80)



6. Create a transitive image named `my_awesome_image`

```
docker commit mynginx1 my_awesome_image
```

7. Run the new image

```
docker run -d -p 8080:80 my_awesome_image
```

8. Check that the modifications are still present (localhost:80)



9. Check the layer with the `docker history` command

```
docker history my_awesome_image
```

```
ubuntu_user@DESKTOP-M1M277H:~$ docker history my_awesome_image
IMAGE          CREATED          CREATED BY          SIZE      COMMENT
8dba0fad8465   3 minutes ago   nginx -g daemon off;  1.2kB     buildkit.dockerfile.v0
ad5708199ec7   13 days ago    CMD ["nginx" "-g" "daemon off;"]  0B        buildkit.dockerfile.v0
<missing>      13 days ago    STOPSIGNAL SIGQUIT    0B        buildkit.dockerfile.v0
<missing>      13 days ago    EXPOSE map[80/tcp:{}]  0B        buildkit.dockerfile.v0
<missing>      13 days ago    ENTRYPOINT ["/docker-entrypoint.sh"]  0B        buildkit.dockerfile.v0
<missing>      13 days ago    COPY 30-tune-worker-processes.sh /docker-ent...  4.62kB    buildkit.dockerfile.v0
<missing>      13 days ago    COPY 20-envsubst-on-templates.sh /docker-ent...  3.02kB    buildkit.dockerfile.v0
<missing>      13 days ago    COPY 15-local-resolvers.envsh /docker-entryp...  389B      buildkit.dockerfile.v0
<missing>      13 days ago    COPY 10-listen-on-ipv6-by-default.sh /docker...  2.12kB    buildkit.dockerfile.v0
<missing>      13 days ago    COPY docker-entrypoint.sh / # buildkit  1.62kB    buildkit.dockerfile.v0
<missing>      13 days ago    RUN /bin/sh -c set -x && groupadd --syst...  118MB     buildkit.dockerfile.v0
<missing>      13 days ago    ENV DYNPKG_RELEASE=1~bookworm  0B        buildkit.dockerfile.v0
<missing>      13 days ago    ENV PKG_RELEASE=1~bookworm  0B        buildkit.dockerfile.v0
<missing>      13 days ago    ENV NJS_RELEASE=1~bookworm  0B        buildkit.dockerfile.v0
<missing>      13 days ago    ENV NJS_VERSION=0.9.1  0B        buildkit.dockerfile.v0
<missing>      13 days ago    ENV NGINX_VERSION=1.29.1  0B        buildkit.dockerfile.v0
<missing>      13 days ago    LABEL maintainer=NGINX Docker Maintainers <d...  0B        buildkit.dockerfile.v0
<missing>      2 weeks ago    # debian.sh --arch 'amd64' out/ 'bookworm' '...'  74.8MB    debuerreotype 0.15
ubuntu_user@DESKTOP-M1M277H:~$
```

Upload our image

1. Tag your image with the tag ``<dockerHubId>/my_awesome_image:1.0``

```
docker tag my_awesome_image AwatefBR/my_awesome_image:1.0
```

2. List your docker images

1. What do you see ?

3. Use the CLI to log into your docker account

```
docker login
```

4. Push your image

```
docker push AwatefBR/my_awesome_image:1.0
```

5. Check that your image is available on ``https://hub.docker.com/repository/docker/AwatefBR/my_awesome_image/``

6. Delete the repository ``https://hub.docker.com/repository/docker/AwatefBR/my_awesome_image/settings``