Intro to Docker

Learn to create, build and deploy Docker containers!

Task 2 Basic Docker Syntax

Question	Answer
If we wanted to pull a docker image, what would our command look like?	docker pull
If we wanted to list all images on a device running Docker, what would our command look like?	docker image ls
Let's say we wanted to pull the image "tryhackme" (no quotations); what would our command look like?	docker pull tryhackme
Let's say we wanted to pull the image "tryhackme" with the tag "1337" (no quotations). What would our command look like?	docker pull tryhackme:1337

Task 3 Running Your First Container

Question	Answer
What would our command look like if we wanted to run a container interactively? Note: Assume we are not specifying any image here.	docker run -it
What would our command look like if we wanted to run a container in "detached" mode? Note: Assume we are not specifying any image here.	docker run -d
Let's say we want to run a container that will run and bind a webserver on port	docker run -p 80:80

80. What would our command look like? Note: Assume we are not specifying any image here.	
How would we list all running containers?	docker ps
Now, how would we list all containers (including stopped)?	docker ps -a

Task 4 Intro to Dockerfiles

Question	Answer
What instruction would we use to specify what base image the container should be using?	FROM
What instruction would we use to tell the container to run a command?	RUN
What docker command would we use to build an image using a Dockerfile?	build
Let's say we want to name this image; what argument would we use?	-t

Task 5 Intro to Docker Compose

Question	Answer
I want to use docker-compose to start up a series of containers. What argument allows me to do this?	up
I want to use docker-compose to delete the series of containers. What argument allows me to do this?	down
What is the name of the .yml file that docker-compose uses? Note: for this question, you will need to include the .yml file extension in your answer	docker-compose.yml

Task 6 Intro to the Docker Socket

Question	Answer
What does the term "IPC" stand for?	Interprocess Communication
What technology can the Docker Server be equalled to?	API

Task 7 Practical

Connect to the machine. What is the name of the container that is currently running?

Answer: cloudisland

Command: docker ps

```
cmnatic@thm-intro-to-docker:~$ docker ps
CONTAINER ID   IMAGE        COMMAND              CREATED       STATUS         PORTS     NAMES
0f24bed8b5ef   cloudisland  "tail -f /dev/null"  20 months ago  Up 3 minutes            CloudIsland
cmnatic@thm-intro-to-docker:~$
```

Use Docker to start a web server with the "webserver" image (no quotations). You will need to run the container with port 80.

After starting the container, try to connect to **https://LAB_WEB_URL.p.thmlabs.com/** in your browser. What is the flag?

Answer: THM{WEBSERVER_CONTAINER}

➔ First i tried getting the container id for web server by listing all containers. As you can see from the status, the container is not running

Command: docker ps -a

```
cmnatic@thm-intro-to-docker:~$ docker ps -a
CONTAINER ID   IMAGE         COMMAND              CREATED       STATUS                  PORTS     NAMES
73de43b5b4ee   webserver     "apache2ctl -D FOREG…"  20 months ago  Exited (137) 20 months ago          clever clarke
a1bc6f07ad09   0006d36bde5f  "/bin/sh -c 'echo \"<…"  20 months ago  Exited (127) 20 months ago          romantic ptolemy
0f24bed8b5ef   cloudisland   "tail -f /dev/null"  20 months ago  Up 12 minutes                       CloudIsland
cmnatic@thm-intro-to-docker:~$
```

➔ Then i started the webserver container

Command: docker start 73de43b5b4ee

- ● Where 73de43b5b4ee is the web server container id

➜ Then confirmed it is now running

Command: docker ps -a

```
cmnatic@thm-intro-to-docker:~$ docker start 73de43b5b4ee
73de43b5b4ee
cmnatic@thm-intro-to-docker:~$ docker ps -a
CONTAINER ID   IMAGE          COMMAND                 CREATED        STATUS                     PORTS
 NAMES
73de43b5b4ee   webserver      "apache2ctl -D FOREG…"  20 months ago  Up 11 seconds              0.0.0.0:80->80/tcp, :::80->80/tcp
 clever clarke
a16c6f07ad09   0006d36bde5f   "/bin/sh -c 'echo \"<…"  20 months ago  Exited (127) 20 months ago
 romantic ptolemy
0f24bed8b5ef   cloudisland    "tail -f /dev/null"     20 months ago  Up 18 minutes
 CloudIsland
cmnatic@thm-intro-to-docker:~$
```

➜ I clicked on the link and i got my flag

```
←  →  C    ⊡ 10-10-78-27.p.thmlabs.com                                              ☆  ⊒  😊  ⋮

                    Congrats! Have a flag: THM{WEBSERVER_CONTAINER}
```

END!!!