#020 Docker cleaning up

Introduction

this is part 19 from the journey it's a long journey(360 day) so go please check previous parts , and if you need to walk in the journey with me please make sure to follow because I may post more than once in 1 Day but surely I will post daily at least one ②.

And I will cover lot of tools as we move on.

Cleaning

Let's see how many stopped containers we have by using

```
docker ps -a
```

We have a lot!

what about images?

```
docker image ls
REPOSITORY
                                                          IMAGE ID
                                                          fad47b82469b
app_018
                                                                              2 days ago
                                                                                                   83MB
                                                                              2 days ago
app_017_2
                                                          10b87eb2faaa
                                                                                                   83MB
                                     latest
                                                          9aa2d3ffcb7b
app_017_1
                                     latest
                                                                                                   83MB
                                                         756f949384db
                                                                                                   970MB
<none>
                                     <none>
                                     latest
                                                         00e5c2965990
                                                                                                   1.39GB
                                                                              2 days ago
frontend
                                     latest
                                                         378ac8d93d53
                                                                                                   114MB
                                                          cdbd5546e4db
                                                                              2 days ago
                                                                                                   1.87GB
c2-client
                                                          225532576e5f
                                                                              4 days ago
                                                                                                   83MB
c1-server
                                                          2bffee066e35
                                                                              4 days ago
                                                                                                   83MB
                                     latest
                                                         a919f9419fea
                                                                                                   83MB
                                                                              4 days ago
                                                         c207c8702592
                                                                              4 days ago
                                                                                                   83MB
<none>
                                     <none>
                                                         d6aa34a1ca12
                                                                                                   83MB
<none>
                                     <none>
rabbitmo
                                                          7e50c60f7e3e
                                                                                                   156MB
app_014
                                     latest
                                                         af274e2c7588
                                                                              5 days ago
                                                                                                   83MB
                                                         db29148a2bf0
app_013
                                     latest
                                                                              6 days ago
                                                                                                   83MB
omarelkhatib/app_009_1
                                                          c3a5aa66659c
                                                                              7 days ago
                                                                                                   83MB
<none>
                                     <none>
                                                         9bf1c30c534b
                                                                              8 days ago
                                                                                                   77.7MB
                                                          da4ea3800722
                                                                              8 days ago
                                                                                                   77.7MB
<none>
                                                          650a0161cf8d
                                                                                                   77.7MB
<none>
                                     <none>
                                                                              8 days ago
                                                          c8a238d4f3eb
                                                                              8 days ago
<none>
                                     <none>
                                                          63b849d01559
                                                                               8 days ago
                                                                                                   77.7MB
<none>
                                     <none>
```

```
docker image ls
```

we see a lot of basically those none are failed building images and they are not being used by anything, they called dangling images.

to see how much docker using space we run

```
(base) in ~
> docker system df
TYPE TOTAL ACTIVE SIZE RECLAIMABLE
Images 37 2 6.1GB 6.1GB (99%)
Containers 17 0 103B 103B (100%)
Local Volumes 6 2 90.95MB 90.95MB (99%)
Build Cache 0 0 0 0B 0B
(base) in ~
>
```

```
docker system df
```

we can see it's taking 6.1GB lot of space

let's clean all images that are not used by containers and dangling, we run

```
(base) in ~
> docker system prune
WARNING! This will remove:
   - all stopped containers
   - all networks not used by at least one container
   - all dangling images
   - all dangling build cache
Are you sure you want to continue? [y/N]
```

docker system prune

some useful tags here:

- -f used to force, so we don't get a prompt to delete (good for automation tools)
- -a used to delete every things including used images.

I am going to use

```
(base) in .
 docker system prune -f
Deleted Containers:
88588cd07e2cd2062e8b865f6837b695d530d41e437b52f370a4fe1d8e40d596
14171bd7b9c5a41d041a67f993a06851496185305f99953aeabfb44d30398482
04431f3746020edb77c65547c7057e19ade6abc54216d1668183f3c619b79105
177765e28a5ca0a435927852df7380c0a0bc997ecf3ce48f7fe2745d8f4196bc
60b181237c169844d23bee50a4efdae3c191408c9becf68cbf603805bdb96d0f
295e0347fd801fd1f792411da02de06eb994641bc808c8e5ea82e6cb633420ad
66cba51159ca47770b6dfacce1c3f16ddb325c75a8620b570c8c1042ffd2e7c7
2a6edb5ebd85aa8475e9fa4897be2ae1660350a4ab3b45a2a07b1b1d2a290e18
f6109e0b818156b6e4ff0debf6c0dd4c0c903589f1414b379711bb4883e2652d
2a871ffc7b3f08963e2780ec2563c2304d7ca2fbd8162238a36e86cdbc6cf4d1
7c7e6b29cb7197de79c96105a40c84c3605e373a9cd52f27e187972b8dbc9f7a
db4827a96393631d3d5260fa26c833bd29e2c018b03aa450557567d94cb56766
23e1798e7399e18fbb8b9d8b53a083b24a51ae5bb87efd313c5e8e10aa89b5dd
9fccf85ddb3b0429b686a9ed6e3efc8f6a03ebc6618c3dc7080cc13b993a4270
6de49f40d68c4cc8cd15fc905e63bcff971982a6ebbd6259db6f49c656a1f80f
ea33cce602641e7abeb1ad8a58755448d8ab998a16b0e1007d560b5c824dbc24
79a0c936101f09fd20aade43adb2f6bd5314e853269494959b25226ca8822661
Deleted Networks:
valorant-watcher_default
fastapi_dashboard_traefik-public
barja_census_default
fastapi_dashboard_default
network1
Deleted Images:
deleted: sha256:9bf1c30c534b04b27db6b152dad8f4c558f70f2fd5f3477714995c9779a3c90c
deleted: sha256:c12faca1f329a6d483aa709c77af03b3167535753292d58bf2808a2eeadc2914
deleted: sha256:63b849d015592b0a7fae173f231de9cc857a4a45b16a70bffa26ac9f7ab0df2b
deleted: sha256:3d5e86e1948f55d822177ad688483d3a655661b2c1a866aefae27e788dad360e
```

```
docker system prune -f
```

we see it delete lot of things, cool!

> docker ps -a						
CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
(base) in ~						
<pre>> docker image ls</pre>						
REPOSITORY		TAG	IMAGE ID	CREATED	SIZE	
app_018		latest	fad47b82469b	2 days ago	83MB	
app_017_2		latest	10b87eb2faaa	2 days ago	83MB	
app_017_1		latest	9aa2d3ffcb7b	2 days ago	83MB	
celeryworker		latest	00e5c2965990	2 days ago	1.39GB	
frontend		latest	378ac8d93d53	2 days ago	114MB	
c2-client		latest	225532576e5f	4 days ago	83MB	
c1-server		latest	2bffee066e35	4 days ago	83MB	
rabbitmq			7e50c60f7e3e	4 days ago	156MB	
app_014		latest	af274e2c7588	5 days ago	83MB	
app_013		latest	db29148a2bf0	6 days ago	83MB	
omarelkhatib/app_0	009_1	latest	c3a5aa66659c	7 days ago	83MB	
python		3.9-rc-alpine	a206803e6cb1	9 days ago	77.7MB	
python		3.7	e4e55e98f1e0	12 days ago	919MB	

```
docker ps -a
docker image ls
```

as we see we have no containers anymore all stopped and all our images gone!

if you need only to stop containers.

```
(base) in ~
 docker container stop $(docker container ls -a -q)
88588cd07e2c
14171bd7b9c5
04431f374602
177765e28a5c
60b181237c16
295e0347fd80
66cba51159ca
2a6edb5ebd85
f6109e0b8181
2a871ffc7b3f
7c7e6b29cb71
db4827a96393
23e1798e7399
9fccf85ddb3b
6de49f40d68c
ea33cce60264
79a0c936101f
(base) in ~
```

docker container stop \$(docker container ls -a -q)