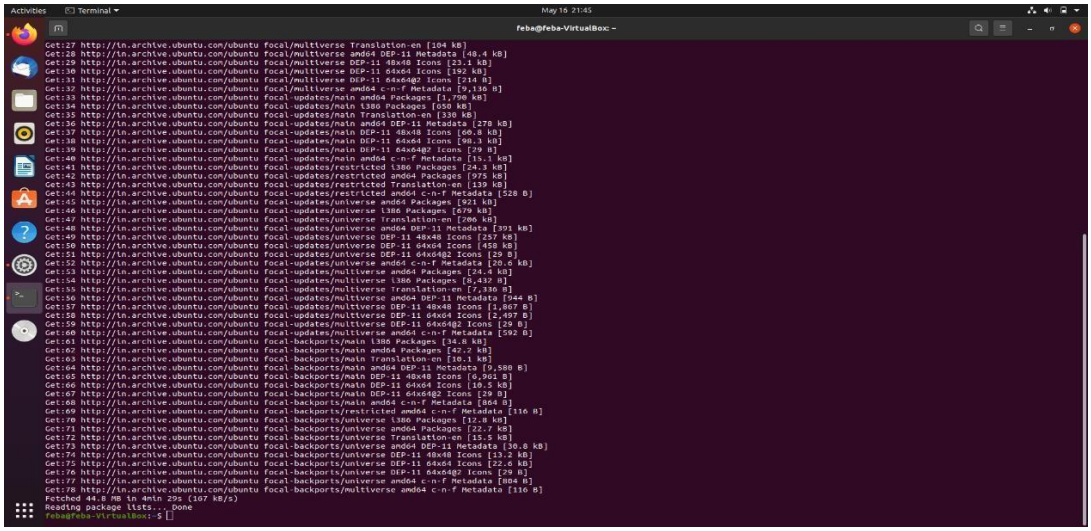
DOCKER AND CONTAINER : INSTALLATION & DEPLOYMENT

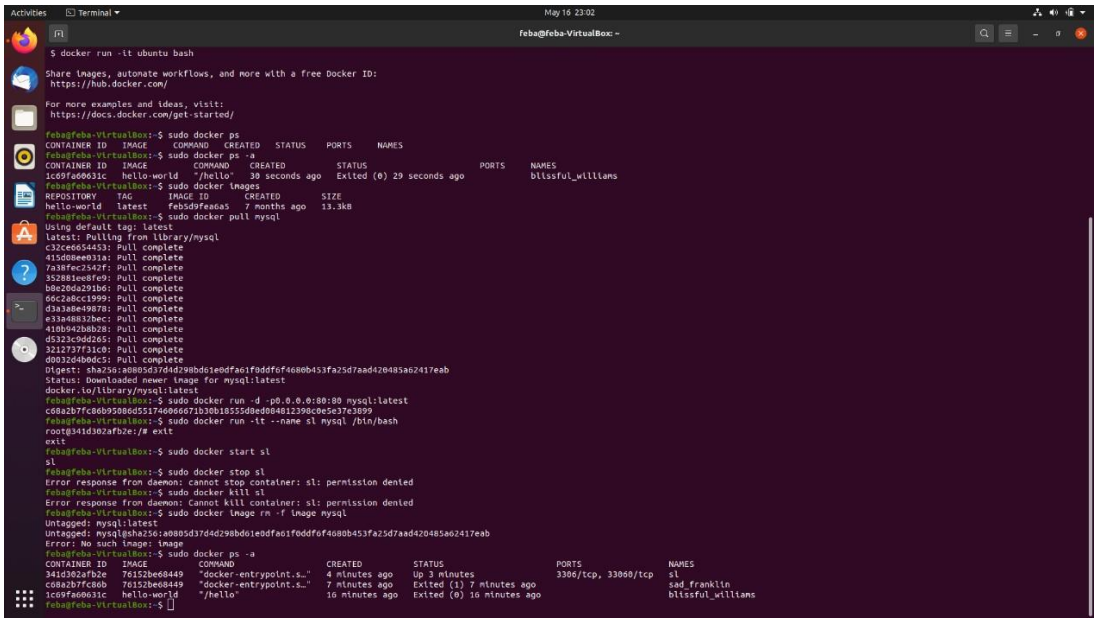
Submitted by ,

Feba Thomas

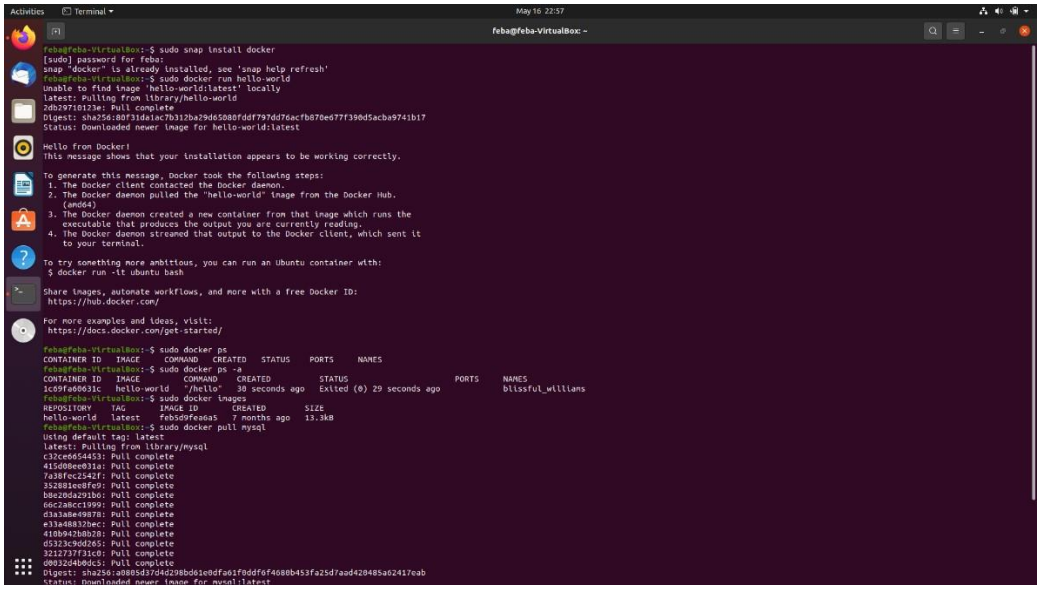
Roll no:50

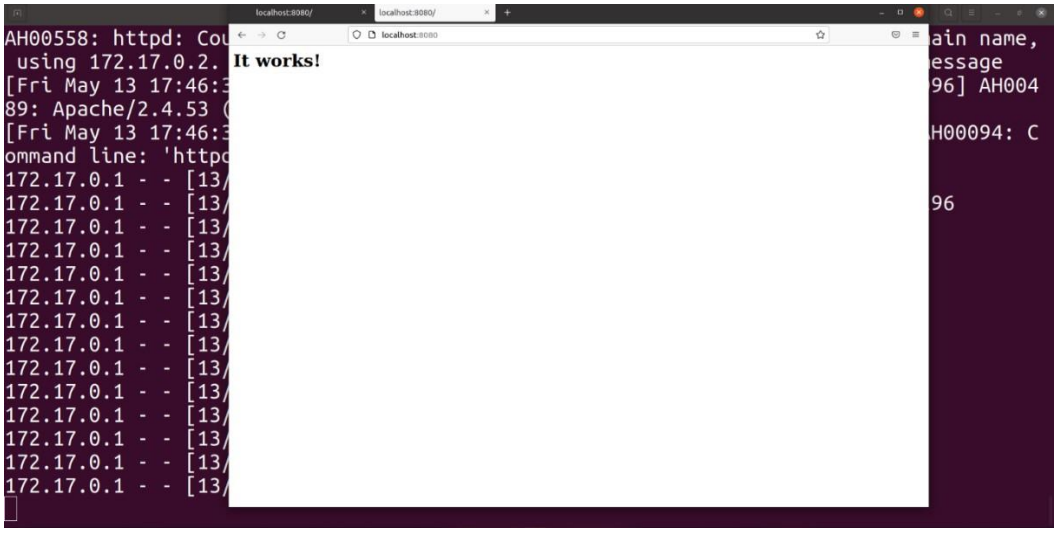
1. Installation of Docker and Container.


Activities
Terminal
May 16 21:45
feba@feba-VirtualBox: ~
Get:27 http://in.archive.ubuntu.com/ubuntu focal/multiverse Translation-en [104 kB]
Get:28 http://in.archive.ubuntu.com/ubuntu focal/multiverse amd64 DEP-11 Metadata [48.4 kB]
Get:29 http://in.archive.ubuntu.com/ubuntu focal/multiverse DEP-11 48x48 Icons [23.1 kB]
Get:30 http://in.archive.ubuntu.com/ubuntu focal/multiverse DEP-11 64x64 Icons [192 kB]
Get:31 http://in.archive.ubuntu.com/ubuntu focal/multiverse DEP-11 64x64@2 Icons [214 B]
Get:32 http://in.archive.ubuntu.com/ubuntu focal/multiverse amd64 c-n-f Metadata [9,136 B]
Get:33 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 Packages [1,790 kB]
Get:34 http://in.archive.ubuntu.com/ubuntu focal-updates/main i386 Packages [650 kB]
Get:35 http://in.archive.ubuntu.com/ubuntu focal-updates/main Translation-en [330 kB]
Get:36 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 DEP-11 Metadata [278 kB]
Get:37 http://in.archive.ubuntu.com/ubuntu focal-updates/main DEP-11 48x48 Icons [60.8 kB]
Get:38 http://in.archive.ubuntu.com/ubuntu focal-updates/main DEP-11 64x64 Icons [98.1 kB]
Get:39 http://in.archive.ubuntu.com/ubuntu focal-updates/main DEP-11 64x64@2 Icons [29 B]
Get:40 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 c-n-f Metadata [15.1 kB]
Get:41 http://in.archive.ubuntu.com/ubuntu focal-updates/restricted i386 Packages [24.3 kB]
Get:42 http://in.archive.ubuntu.com/ubuntu focal-updates/restricted amd64 Packages [975 kB]
Get:43 http://in.archive.ubuntu.com/ubuntu focal-updates/restricted Translation-en [139 kB]
Get:44 http://in.archive.ubuntu.com/ubuntu focal-updates/restricted amd64 c-n-f Metadata [528 B]
Get:45 http://in.archive.ubuntu.com/ubuntu focal-updates/universe amd64 Packages [921 kB]
Get:46 http://in.archive.ubuntu.com/ubuntu focal-updates/universe i386 Packages [679 kB]
Get:47 http://in.archive.ubuntu.com/ubuntu focal-updates/universe Translation-en [280 kB]
Get:48 http://in.archive.ubuntu.com/ubuntu focal-updates/universe amd64 DEP-11 Metadata [391 kB]
Get:49 http://in.archive.ubuntu.com/ubuntu focal-updates/universe DEP-11 48x48 Icons [257 kB]
Get:50 http://in.archive.ubuntu.com/ubuntu focal-updates/universe DEP-11 64x64 Icons [458 kB]
Get:51 http://in.archive.ubuntu.com/ubuntu focal-updates/universe DEP-11 64x64@2 Icons [29 B]
Get:52 http://in.archive.ubuntu.com/ubuntu focal-updates/universe amd64 c-n-f Metadata [20.6 kB]
Get:53 http://in.archive.ubuntu.com/ubuntu focal-updates/multiverse amd64 Packages [24.4 kB]
Get:54 http://in.archive.ubuntu.com/ubuntu focal-updates/multiverse i386 Packages [8,432 B]
Get:55 http://in.archive.ubuntu.com/ubuntu focal-updates/multiverse Translation-en [7,336 B]
Get:56 http://in.archive.ubuntu.com/ubuntu focal-updates/multiverse amd64 DEP-11 Metadata [944 B]
Get:57 http://in.archive.ubuntu.com/ubuntu focal-updates/multiverse DEP-11 48x48 Icons [1,867 B]
Get:58 http://in.archive.ubuntu.com/ubuntu focal-updates/multiverse DEP-11 64x64 Icons [2,497 B]
Get:59 http://in.archive.ubuntu.com/ubuntu focal-updates/multiverse DEP-11 64x64@2 Icons [29 B]
Get:60 http://in.archive.ubuntu.com/ubuntu focal-updates/multiverse amd64 c-n-f Metadata [592 B]
Get:61 http://in.archive.ubuntu.com/ubuntu focal-backports/main i386 Packages [34.8 kB]
Get:62 http://in.archive.ubuntu.com/ubuntu focal-backports/main amd64 Packages [42.2 kB]
Get:63 http://in.archive.ubuntu.com/ubuntu focal-backports/main Translation-en [10.1 kB]
Get:64 http://in.archive.ubuntu.com/ubuntu focal-backports/main amd64 DEP-11 Metadata [9,580 B]
Get:65 http://in.archive.ubuntu.com/ubuntu focal-backports/main DEP-11 48x48 Icons [6,961 B]
Get:66 http://in.archive.ubuntu.com/ubuntu focal-backports/main DEP-11 64x64 Icons [10.5 kB]
Get:67 http://in.archive.ubuntu.com/ubuntu focal-backports/main DEP-11 64x64@2 Icons [29 B]
Get:68 http://in.archive.ubuntu.com/ubuntu focal-backports/main amd64 c-n-f Metadata [864 B]
Get:69 http://in.archive.ubuntu.com/ubuntu focal-backports/restricted amd64 c-n-f Metadata [116 B]
Get:70 http://in.archive.ubuntu.com/ubuntu focal-backports/universe i386 Packages [12.8 kB]
Get:71 http://in.archive.ubuntu.com/ubuntu focal-backports/universe amd64 Packages [22.7 kB]
Get:72 http://in.archive.ubuntu.com/ubuntu focal-backports/universe Translation-en [15.5 kB]
Get:73 http://in.archive.ubuntu.com/ubuntu focal-backports/universe amd64 DEP-11 Metadata [30.8 kB]
Get:74 http://in.archive.ubuntu.com/ubuntu focal-backports/universe DEP-11 48x48 Icons [13.2 kB]
Get:75 http://in.archive.ubuntu.com/ubuntu focal-backports/universe DEP-11 64x64 Icons [22.6 kB]
Get:76 http://in.archive.ubuntu.com/ubuntu focal-backports/universe DEP-11 64x64@2 Icons [29 B]
Get:77 http://in.archive.ubuntu.com/ubuntu focal-backports/universe amd64 c-n-f Metadata [804 B]
Get:78 http://in.archive.ubuntu.com/ubuntu focal-backports/multiverse amd64 c-n-f Metadata [116 B]
Fetched 44.8 MB in 4min 29s (167 kB/s)
Reading package lists... Done
feba@feba-VirtualBox:~$

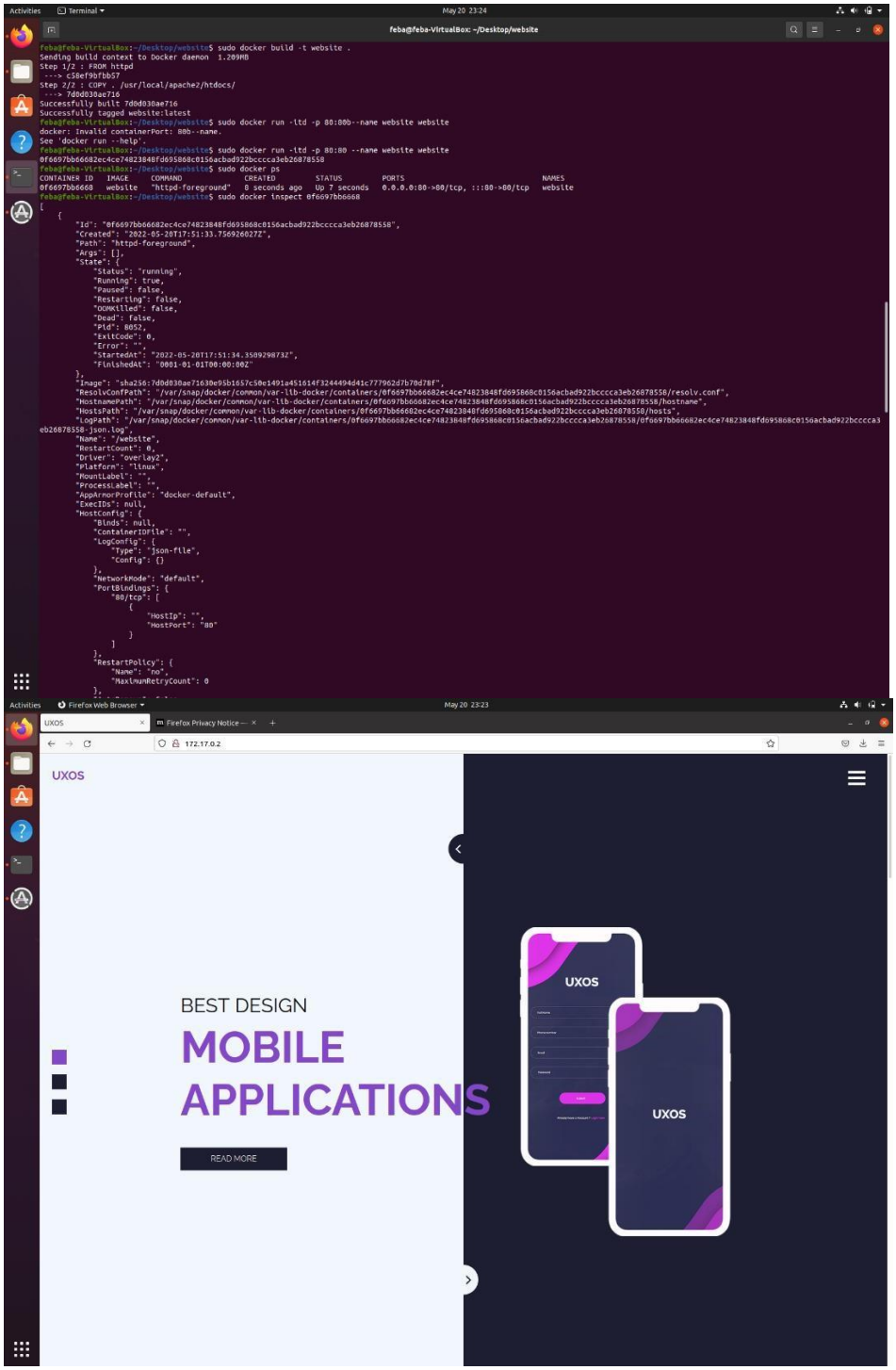

Activities
Terminal
May 16 23:02
feba@feba-VirtualBox: ~
$ docker run -it ubuntu bash
Share images, automate workflows, and more with a free Docker ID:
https://hub.docker.com/
For more examples and ideas, visit:
https://docs.docker.com/get-started/
feba@feba-VirtualBox:~$ sudo docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
feba@feba-VirtualBox:~$ sudo docker ps -a
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
1c69fa06631c hello-world "/hello" 30 seconds ago Exited (0) 29 seconds ago blissful_williams
feba@feba-VirtualBox:~$ sudo docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
hello-world latest feb5d9fea6a5 7 months ago 13.3kB
feba@feba-VirtualBox:~$ sudo docker pull mysql
Using default tag: latest
latest: Pulling from library/mysql
c32ce6654453: Pull complete
415d88ee031a: Pull complete
7a38fec2542f: Pull complete
352881ee8fe9: Pull complete
b0e20da291b6: Pull complete
66c2a8cc1999: Pull complete
d3a3a8e49878: Pull complete
e33a48832bec: Pull complete
410b942b8b28: Pull complete
d5323c9dd265: Pull complete
3212737f31c0: Pull complete
d0032d4b0dc5: Pull complete
Digest: sha256:a0805d37d4d298bd61e0dfa61f0ddf6f4680b453fa25d7aad420485a62417eab
Status: Downloaded newer image for mysql:latest
docker.io/library/mysql:latest
feba@feba-VirtualBox:~$ sudo docker run -d -p0.0.0.0:80:80 mysql:latest
c68a2bf7c86b95086d55174606667 1b30b18555d8ed804812398c0e5e37e3899
feba@feba-VirtualBox:~$ sudo docker run -it --name sl mysql /bin/bash
root@341d302afb2e:/# exit
exit
feba@feba-VirtualBox:~$ sudo docker start sl
sl
feba@feba-VirtualBox:~$ sudo docker stop sl
Error response from daemon: cannot stop container: sl: permission denied
feba@feba-VirtualBox:~$ sudo docker kill sl
Error response from daemon: Cannot kill container: sl: permission denied
feba@feba-VirtualBox:~$ sudo docker image rm -f image mysql
Untagged: mysql:latest
Untagged: mysql@sha256:a0805d37d4d298bd61e0dfa61f0ddf6f4680b453fa25d7aad420485a62417eab
Error: No such image: image
feba@feba-VirtualBox:~$ sudo docker ps -a
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
341d302afb2e 76152be68449 "docker-entrypoint.s..." 4 minutes ago Up 3 minutes 3306/tcp, 33060/tcp sl
c68a2bf7c86b 76152be68449 "docker-entrypoint.s..." 7 minutes ago Exited (1) 7 minutes ago sad_franklin
1c69fa06631c hello-world "/hello" 16 minutes ago Exited (0) 16 minutes ago blissful_williams
feba@feba-VirtualBox:~$

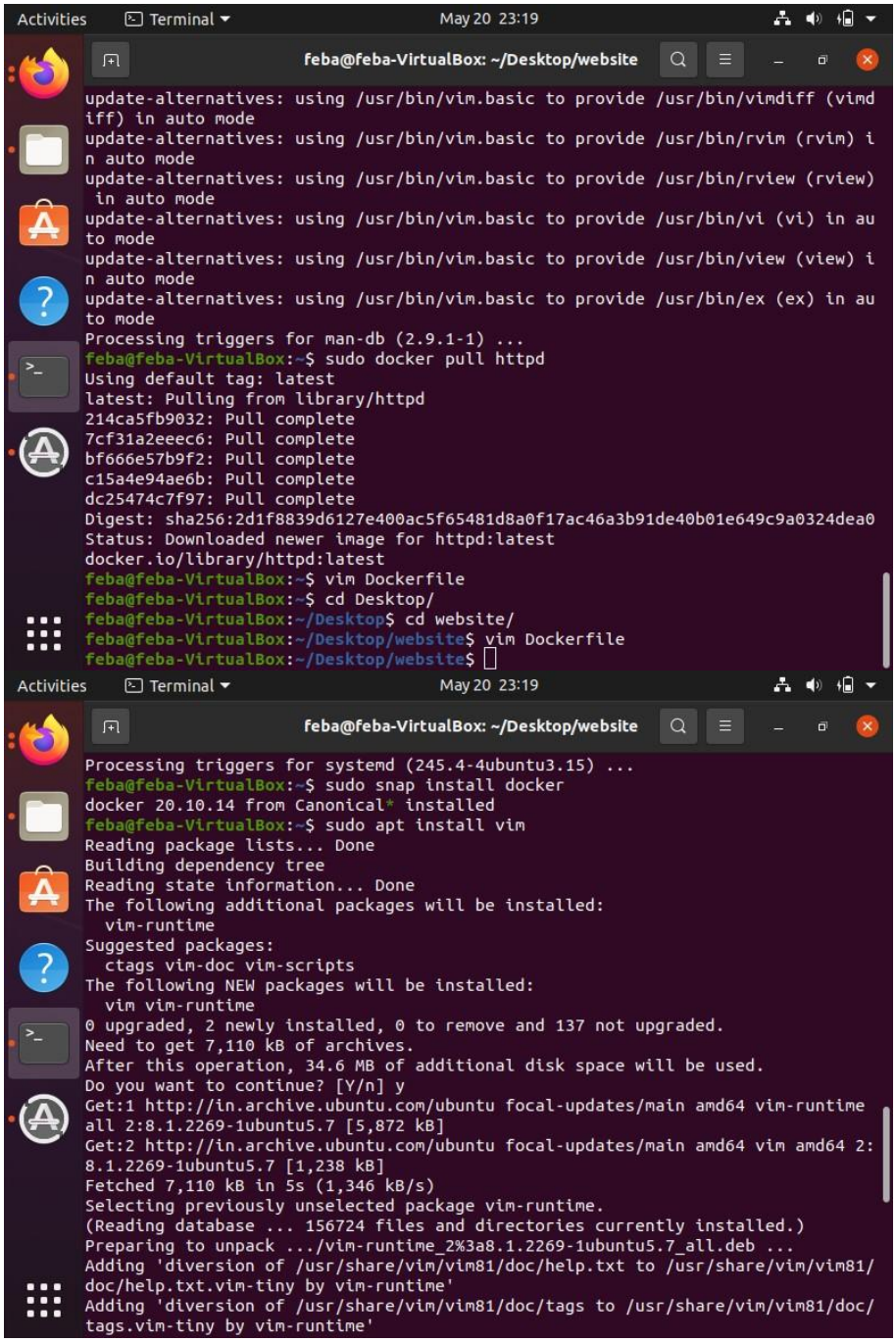
2. Deployment of Apache and MySQL in your container.

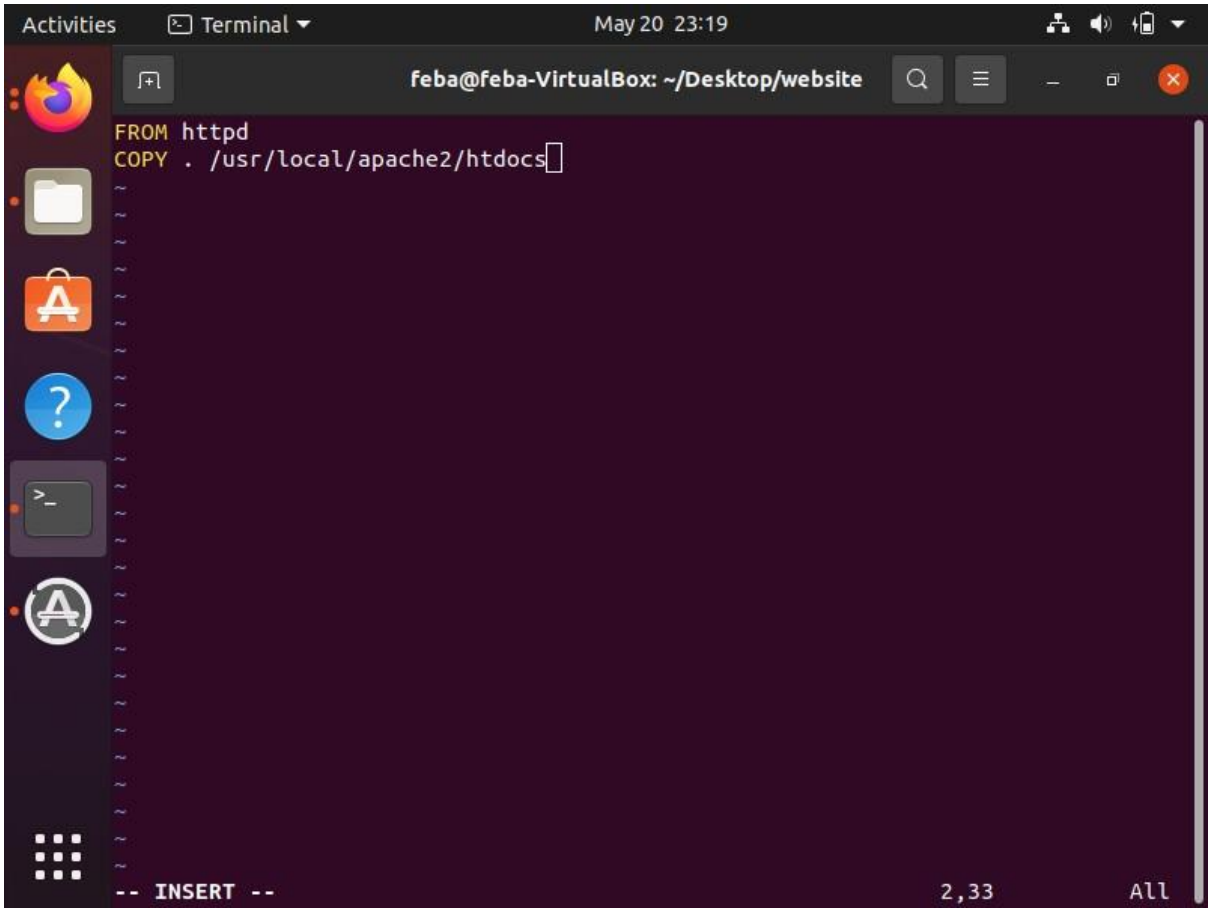




3. Research & find out how can host your own simple website with it.


Activities
Terminal
May 20 23:24
feba@feba-VirtualBox: ~/Desktop/website
feba@feba-VirtualBox:~/Desktop/website$ sudo docker build -t website .
Sending build context to Docker daemon 1.209MB
Step 1/2 : FROM httpd
---> c58ef9bfbb67
Step 2/2 : COPY . /usr/local/apache2/htdocs/
---> 7d0d030ae716
Successfully built 7d0d030ae716
Successfully tagged website:latest
feba@feba-VirtualBox:~/Desktop/website$ sudo docker run -itd -p 80:80b--name website website
docker: Invalid containerPort: 80b--name.
See 'docker run --help'.
feba@feba-VirtualBox:~/Desktop/website$ sudo docker run -itd -p 80:80 --name website website
0f6697bb66682ec4ce74823848fd695868c0156acbad922bcccca3eb26878558
feba@feba-VirtualBox:~/Desktop/website$ sudo docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
0f6697bb6668 website "httpd-foreground" 8 seconds ago Up 7 seconds 0.0.0.0:80->80/tcp, :::80->80/tcp website
feba@feba-VirtualBox:~/Desktop/website$ sudo docker inspect 0f6697bb6668
[
{
"Id": "0f6697bb66682ec4ce74823848fd695868c0156acbad922bcccca3eb26878558",
"Created": "2022-05-20T17:51:33.756926027Z",
"Path": "httpd-foreground",
"Args": [],
"State": {
"Status": "running",
"Running": true,
"Paused": false,
"Restarting": false,
"OOMKilled": false,
"Dead": false,
"Pid": 8052,
"ExitCode": 0,
"Error": "",
"StartedAt": "2022-05-20T17:51:34.350929873Z",
"FinishedAt": "0001-01-01T00:00:00Z"
},
"Image": "sha256:7d0d030ae71630e95b1657c58e1491a451614f3244494d41c777962d7b78d78f",
"ResolvConfPath": "/var/snap/docker/common/var-lib-docker/containers/0f6697bb66682ec4ce74823848fd695868c0156acbad922bcccca3eb26878558/resolv.conf",
"HostnamePath": "/var/snap/docker/common/var-lib-docker/containers/0f6697bb66682ec4ce74823848fd695868c0156acbad922bcccca3eb26878558/hostname",
"HostsPath": "/var/snap/docker/common/var-lib-docker/containers/0f6697bb66682ec4ce74823848fd695868c0156acbad922bcccca3eb26878558/hosts",
"LogPath": "/var/snap/docker/common/var-lib-docker/containers/0f6697bb66682ec4ce74823848fd695868c0156acbad922bcccca3eb26878558/0f6697bb66682ec4ce74823848fd695868c0156acbad922bcccca3eb26878558-json.log",
"Name": "/website",
"RestartCount": 0,
"Driver": "overlay2",
"Platform": "linux",
"MountLabel": "",
"ProcessLabel": "",
"AppArmorProfile": "docker-default",
"ExecIDs": null,
"HostConfig": {
"Binds": null,
"ContainerIDFile": "",
"LogConfig": {
"Type": "json-file",
"Config": {}
},
"NetworkMode": "default",
"PortBindings": {
"80/tcp": [
{
"HostIp": "",
"HostPort": "80"
}
]
},
"RestartPolicy": {
"Name": "no",
"MaximumRetryCount": 0
},
Activities
Firefox Web Browser
May 20 23:23
UXOS
Firefox Privacy Notice —
172.17.0.2
UXOS
BEST DESIGN
MOBILE
APPLICATIONS
READ MORE
UXOS
UXOS


Activities
Terminal
May 20 23:19
feba@feba-VirtualBox: ~/Desktop/website
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/vimdiff (vimdiff) in auto mode
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/rvim (rvim) in auto mode
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/rview (rview) in auto mode
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/vi (vi) in auto mode
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/view (view) in auto mode
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/ex (ex) in auto mode
Processing triggers for man-db (2.9.1-1) ...
feba@feba-VirtualBox:~$ sudo docker pull httpd
Using default tag: latest
latest: Pulling from library/httpd
214ca5fb9032: Pull complete
7cf31a2eeec6: Pull complete
bf666e57b9f2: Pull complete
c15a4e94ae6b: Pull complete
dc25474c7f97: Pull complete
Digest: sha256:2d1f8839d6127e400ac5f65481d8a0f17ac46a3b91de40b01e649c9a0324dea0
Status: Downloaded newer image for httpd:latest
docker.io/library/httpd:latest
feba@feba-VirtualBox:~$ vim Dockerfile
feba@feba-VirtualBox:~$ cd Desktop/
feba@feba-VirtualBox:~/Desktop$ cd website/
feba@feba-VirtualBox:~/Desktop/website$ vim Dockerfile
feba@feba-VirtualBox:~/Desktop/website$
Activities
Terminal
May 20 23:19
feba@feba-VirtualBox: ~/Desktop/website
Processing triggers for systemd (245.4-4ubuntu3.15) ...
feba@feba-VirtualBox:~$ sudo snap install docker
docker 20.10.14 from Canonical* installed
feba@feba-VirtualBox:~$ sudo apt install vim
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
vim-runtime
Suggested packages:
ctags vim-doc vim-scripts
The following NEW packages will be installed:
vim vim-runtime
0 upgraded, 2 newly installed, 0 to remove and 137 not upgraded.
Need to get 7,110 kB of archives.
After this operation, 34.6 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 vim-runtime all 2:8.1.2269-1ubuntu5.7 [5,872 kB]
Get:2 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 vim amd64 2:8.1.2269-1ubuntu5.7 [1,238 kB]
Fetched 7,110 kB in 5s (1,346 kB/s)
Selecting previously unselected package vim-runtime.
(Reading database ... 156724 files and directories currently installed.)
Preparing to unpack .../vim-runtime_2%3a8.1.2269-1ubuntu5.7_all.deb ...
Adding 'diversion of /usr/share/vim/vim81/doc/help.txt to /usr/share/vim/vim81/doc/help.txt.vim-tiny by vim-runtime'
Adding 'diversion of /usr/share/vim/vim81/doc/tags to /usr/share/vim/vim81/doc/tags.vim-tiny by vim-runtime'


Activities
Terminal
May 20 23:19
feba@feba-VirtualBox: ~/Desktop/website
FROM httpd
COPY . /usr/local/apache2/htdocs
-- INSERT --
2,33
All