Day2-Exercise

Networking

podman ps

podman run -d --name apache -p 80:80 quay.io/kushalsamota/httpd

podman ps

curl localhost:80

podman network ls

podman network inspect podman === and see the range from which container are having the ip addresses

podman run -itd --name centos1 quay.io/kushalsamota/centos

podman run -itd --name centos2 quay.io/kushalsamota/centos

podman inspect centos1 | grep -i ip

podman inspect centos2 | grep -i ip

podman exec -it centos1 bash

ping <ip of centos2>

exit

podman rm -f centos1 centos2

podman rm -f apache

podman run -d --name nginx -p 82:80 quay.io/kushalsamota/nginx

netstat -tulpn | grep -i listen ===== and see which process is listening on 82 port number. you will also see the pid of process listening on 82. like 19742/82

ps -ef | grep pidofprocess

curl localhost:82

podman rm -f nginx

podman run -d -p 80:80 --name apache1 quay.io/kushalsamota/httpd

podman run -d -p 82:80 --name apache2 quay.io/kushalsamota/httpd

podman port --all === to see all port mappings.

podman rm -f apache1 apache2

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Volume Exercise

# volume exercise #

podman rm -fa

podman rmi -fa

if some images is there remove them

mkdir /websitedata

echo "<h1> It Works </h1>" > /websitedata/index.html

cat /websitedata/index.html

podman run -d --name apachecontainer -v /websitedata:/usr/local/apache2/htdocs:Z -p 80:80 quay.io/kushalsamota/httpd

curl localhost

podman exec -it apachecontainer bash

echo hello >> /usr/local/apache2/htdocs/index.html

#it will change because we have mounted in rw mode.#

exit

cat /websitedata/index.html === see the change

podman rm -f apachecontainer

podman run -d --name apachecontainer -v /websitedata:/usr/local/apache2/htdocs:Z,ro -p 80:80 quay.io/kushalsamota/httpd

podman exec -it apachecontainer bash

echo hello >> /usr/local/apache2/htdocs/index.html

#it will give error as we have mounted volume in ro mode.

exit

podman rm -f apachecontainer

podman rmi quay.io/kushalsamota/httpd

#another way to create volume is#

podman volume create mysqldata

podman volume ls

podman volume inspect mysqldata

ls /var/lib/containers/storage/ === there will be a volumes folder go in that and verify mysqldata folder

podman run -d --name mysql -e MYSQL\_ROOT\_PASSWORD=redhat -v mysqldata:/var/lib/mysql quay.io/kushalsamota/mysql

podman ps

podman rm -f mysql

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Dockerfile Exercise

yum install vim -y

mkdir /apache

cd /apache

mkdir src

echo hello > src/index.html

touch Dockerfile

vim Dockerfile

FROM docker.io/kushalsamota/centos:web

RUN yum install httpd -y

COPY ./src /var/www/html

CMD ["/usr/sbin/httpd","-D","FOREGROUND"]

save the file

podman build -t apache:v1 .

podman run -d --name apachecontainer -p 80:80 apache:v1

curl localhost

podman rm -f apachecontainer

podman rmi apache:v1

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mkdir /apache2

cd /apache2

mkdir src

echo hello > src/index.html

touch Dockerfile

vim Dockerfile

FROM docker.io/kushalsamota/centos:web

MAINTAINER kushalsamota kushalsamota@gmail.com

LABEL runinformation podman run -d imagename

LABEL info this is my testing image

ENV PORT 8080

ENV CITY udaipur

RUN yum install httpd -y

COPY ./src /var/www/html

CMD ["/usr/sbin/httpd","-D","FOREGROUND"]

save the file

podman build -t apache:v1 .

podman images

podman inspect apache:v1 === see the env label author

podman run -d --name apachecontainer -p 80:80 apache:v1

podman exec -it apachecontainer bash

env === see the env mentioned or not

exit

podman rm -f apachecontainer

podman run -d --name apachecontainer -e PORT=80 -p 80:80 apache:v1

podman exec -it apachecontainer bash

env === see the env mentioned or not

exit

curl localhost

podman rm -f apachecontainer

podman rmi apache:v1

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mkdir /apache3

cd /apache3

mkdir src

echo hello > src/index.html

touch Dockerfile

vim Dockerfile

FROM docker.io/kushalsamota/centos:web

MAINTAINER kushalsamota kushalsamota@gmail.com

LABEL runinformation podman run -d imagename

LABEL info this is my testing image

ENV PORT 8080

EXPOSE 80

RUN yum install httpd -y

COPY ./src /var/www/html

CMD ["/usr/sbin/httpd","-D","FOREGROUND"]

save the file

podman build -t apache:v1 .

podman images

podman inspect apache:v1 === see the label author cmd env and expose port

podman ps

podman run -d --name apachecontainer -p 80:80 apache:v1

curl localhost

podman rm -f apachecontainer

podman rmi apache:v1

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mkdir /apache4

cd /apache4

mkdir src

echo hello > src/index.html

touch Dockerfile

vim Dockerfile

FROM docker.io/kushalsamota/centos:web

MAINTAINER kushalsamota kushalsamota@gmail.com

LABEL runinformation podman run -d imagename

LABEL info this is my testing image

ENV PORT 80

EXPOSE 80

RUN yum install httpd -y

WORKDIR /var/www/html

COPY ./src /var/www/html

CMD ["/usr/sbin/httpd","-D","FOREGROUND"]

save the file

podman build -t apache:v1 .

podman run -d --name apachecontainer -p 80:80 apache:v1

curl localhost

podman rm -f apachecontainer

podman rmi apache:v1

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