Task 2 Dockerfile

Docker

Docker is a set of platform as a service products that use OS-level virtualization to deliver software in packages called containers.

Dockerfile

Dockerfiles are text documents that allow you to build images for Docker

Dockerfile content

```
FROM ubuntu:latest
RUN apt-get -y update
RUN apt-get -y install git
RUN apt-get install -y openjdk-11-jdk
RUN apt-get -y install maven
RUN git clone
https://github.com/Chandangowdashankar/dockerfiletask.git /home/
RUN mvn -f /home/pom.xml clean package
ENTRYPOINT ["java","-jar","/home/target/dockertask-1.jar"]
```

- FROM ubuntu:latest
  it will took the ubuntu image from Docker hub
  FROM is used to took the image

- RUN apt-get -y update
  it will update ubuntu repository

- RUN apt-get -y install git
  we can install git inside ubuntu image usinf this RUN command

- RUN apt-get install -y openjdk-11-jdk
  it will install jdk verson 11 inside image

- RUN apt-get -y install maven
  used to install maven inside ubuntu images

- RUN git clone
  https://github.com/Chandangowdashankar/dockerfiletask.git
  /home/
  we can run a command to clone an git repository inside ubuntu

home folder

- RUN mvn -f /home/pom.xml clean pack
  we are already installed maven using that maven we can run this command -f ndicate the path of the pom file
  then using that pom.xml file it will done task of clean and package

- ENTRYPOINT ["java","-jar","/home/target/dockertask-1.jar"]
  basically ENTRYPOINT is used to run task continously
  if we use CMD insted of ENTRYPOINT it will run jdk while creating an image it self we can't access that in port
  thats way we need ENTRYPOINT

➔ Using this Dockerfile we can build image
  sudo docker build -t <imagename> .
  -t – tag
  <imagename> - is new name we need to assign to that image
  . - it will search Dockerfile within that folder ti build
➔ if we build this Dockerfile
  sudo docker build -t chandan .
➔ We can get chandan named image
➔ for that we need to run an command called docker iamges
➔ we have chandan named image
➔ we need to run this image
➔ like – sudo docker run -it -d -p 8080:8080 chandan

  -it – interactive mode
  -d – detached mode (it run all task background)
  -p – is used to assign port
  8080:8080 – outsideport:tcpport
  chandan – is an image name to be run
➔ After that we can see ruuning container
➔ to see running container docker ps
➔ to see all the container docker ps -a

➔ Finally we can access that jar file in the 8080 port
  like IP:8080(example 192.12.5.0:8080)

THANK YOU