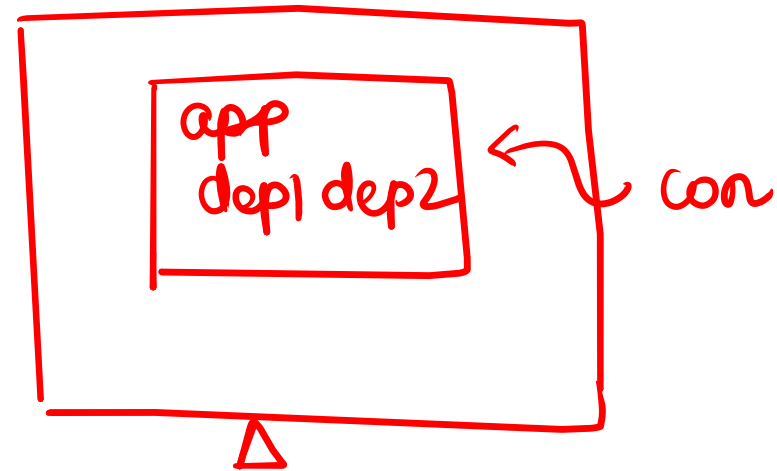


# Docker - 4

★

netfix

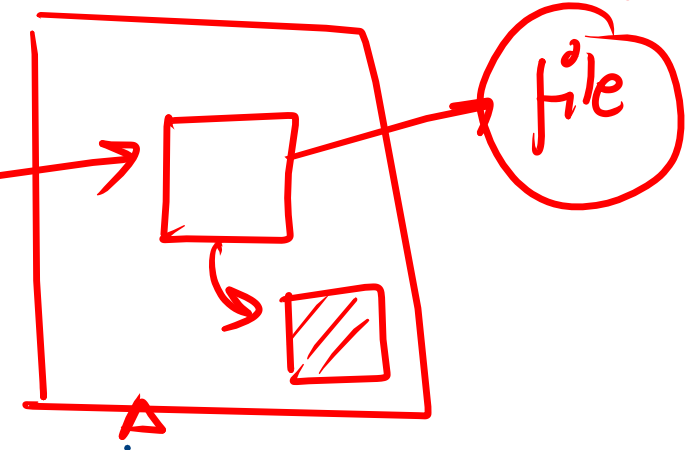


developer

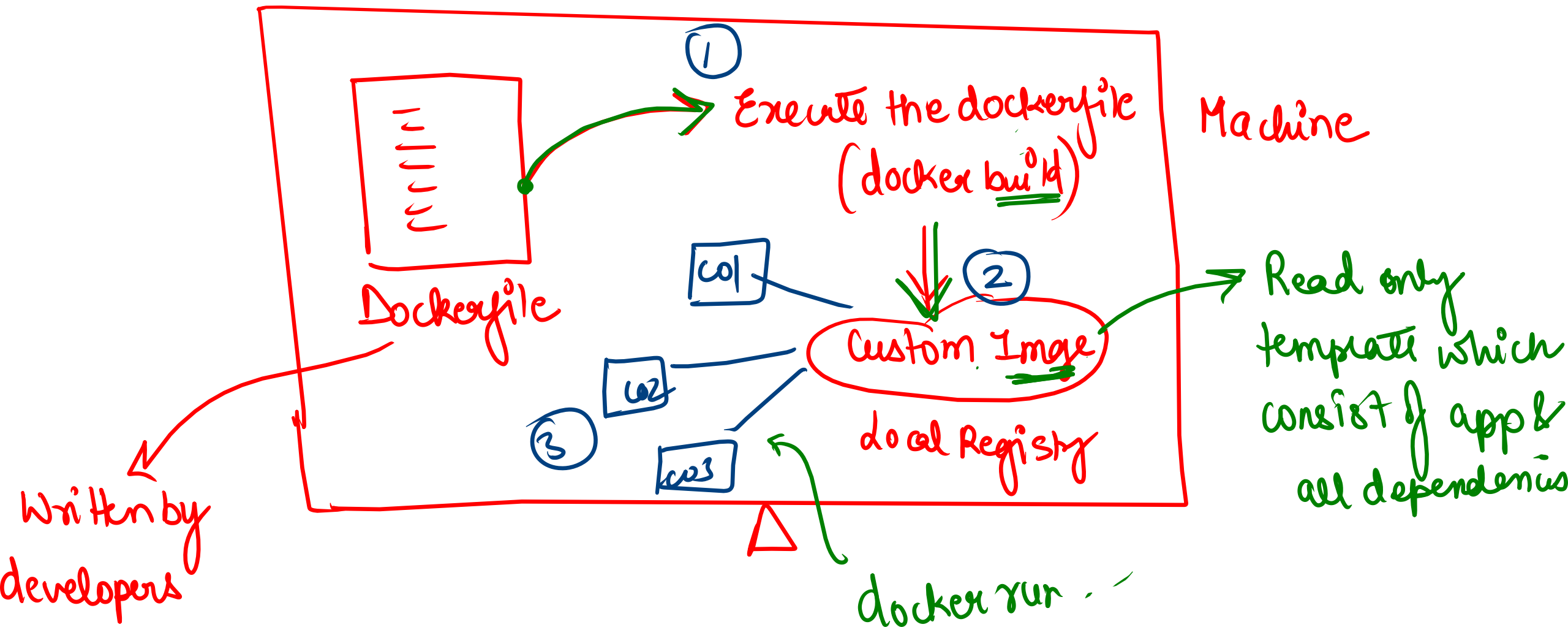
devops engineer

let me share you a file  
with all the dependencies

Dockerfile



Docker file is a text file which consist of all the instructions which is required to create a custom image from which we can create any number of containers



1) Developer will share the Dockerfile with us

2) we will run the Dockerfile via command `docker build -t customimage .`

it will create a custom image for us

3) We will use the custom image to create a container ...

`docker run -it --name c02 customimagename /bin/bash`

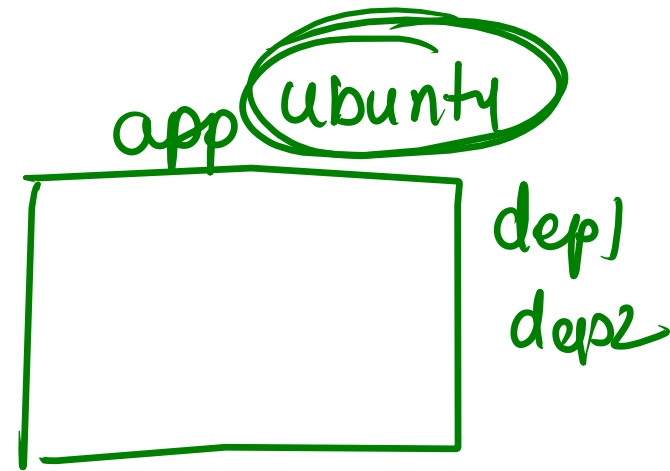


Base Image

from  
which container  
would be created

## How to write Dockerfile

Docker file is written using parameters for example:



**FROM** : base image which will be used finally for the container .  
your Dockerfile will always start FROM

e.g FROM ubuntu  
FROM alpine  
FROM mysql

**RUN** : if we want to execute some command when image will be created

e.g  
RUN apt update  
RUN apt install apache2 -y  
RUN mkdir mydirectory

**COPY** : it will copy the file from the machine inside the container when the con will be created

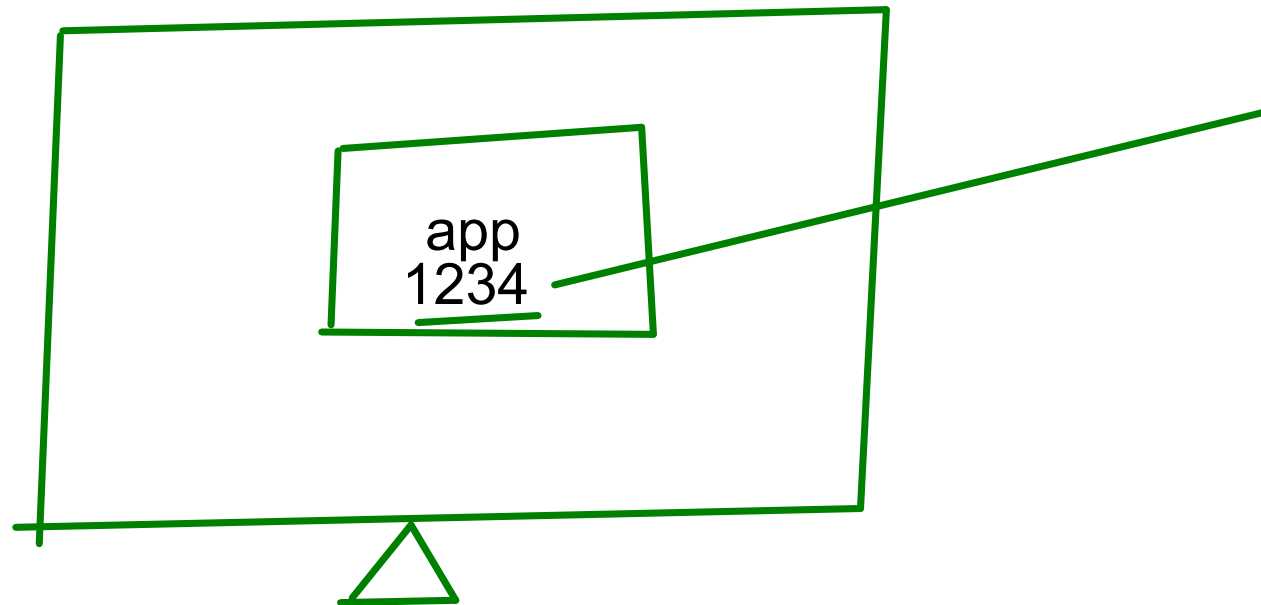
e.g  
COPY sourcefilelocation destinationfilelocation

4) MAINTAINER : here we put the details of the person who has last updated this dockerfile

eg MAINTAINER akshat <akshu20791@gmail>

## maintainer does not make any changes to the container

5) EXPOSE : port on which ur application is exposed by the developer



e.g  
EXPOSE 1234

it will tell that app is running on  
port 1234

vi Dockerfile

```
FROM ubuntu
MAINTAINER akshat <akshatdeveloper@gmail.com>
RUN apt update
RUN apt install git -y
RUN touch file1 file2
COPY akshat.txt /tmp
```

```
root@ip-172-31-13-125:/home/ubuntu# touch akshat.txt
root@ip-172-31-13-125:/home/ubuntu# ls
akshat.txt
root@ip-172-31-13-125:/home/ubuntu#
```

vi Dockerfile

```
FROM ubuntu
MAINTAINER akshat <akshatdeveloper@gmail.com>
RUN apt update
RUN apt install git -y
RUN touch file1 file2
COPY akshat.txt /tmp
```

you need to ensure that FROM MAINTAINER RUN COPY should be in capital letters

```
root@ip-172-31-13-125:/home/ubuntu# docker build -t akshating .
DEPRECATED: The legacy builder is deprecated and will be removed in a future release.
             Install the buildx component to build images with BuildKit:
             https://docs.docker.com/go/buildx/

Sending build context to Docker daemon  13.82kB
Step 1/6 : FROM ubuntu
--> bf16bdcff9c9
```

we are creating a custom image named akshating from the dockerfile present in the current directory(.

t : tag

custom image name

current dir where your dockerfile is present

```

root@ip-172-31-13-125:/home/ubuntu# docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
akshatimg           latest             455a12a3a7b5       3 minutes ago      210MB
ubuntu              latest            bf16bdcff9c9       13 days ago        78.1MB
root@ip-172-31-13-125:/home/ubuntu#

```

in images in local registry  
you will see the akshatimg  
created

```

root@ip-172-31-13-125:/home/ubuntu# docker run -it --name c02 akshatimg /bin/bash
root@f4559a6c0058:/#

```

We will create a container with name c02 from akshatimg (custom image) present in local registry

```

root@ip-172-31-13-125:/home/ubuntu# docker run -it --name c02 akshatimg /bin/bash
root@f4559a6c0058:/# ls
bin  boot  dev  etc  file1  file2  home  lib  lib64  media  mnt  opt  proc  root  run  sbin  srv  sys  tmp  usr  var
root@f4559a6c0058:/# cd tmp
root@f4559a6c0058:/tmp# ls
akshat.txt
root@f4559a6c0058:/tmp# git --version
git version 2.43.0
root@f4559a6c0058:/tmp#

```