dockers

docker

creating & working with containers

Dockerfile & its references

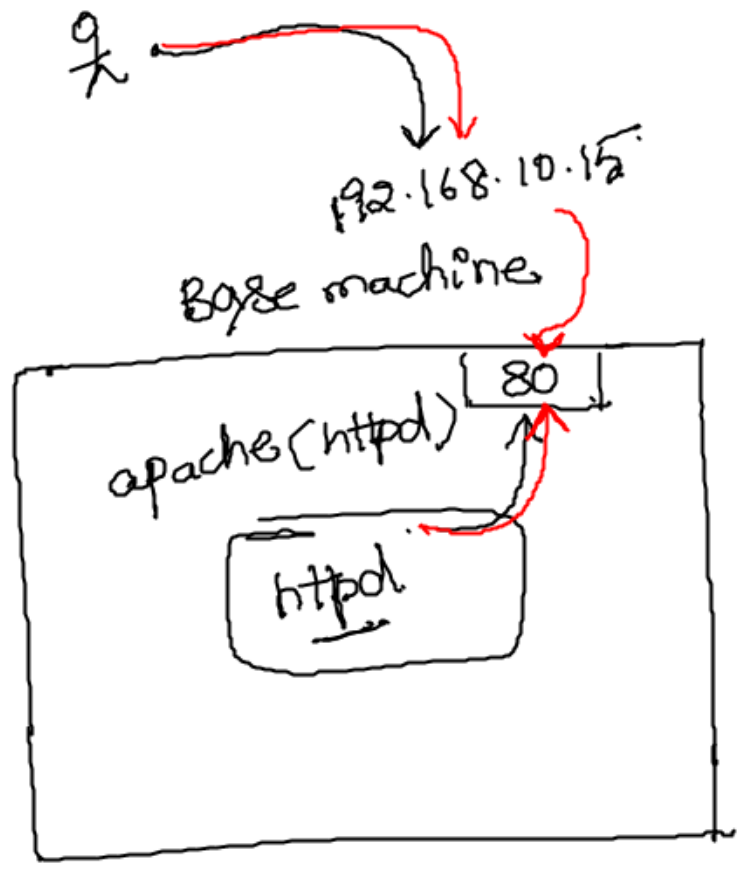
network management

storage management

working with registry

Hosting Application

port forwarding



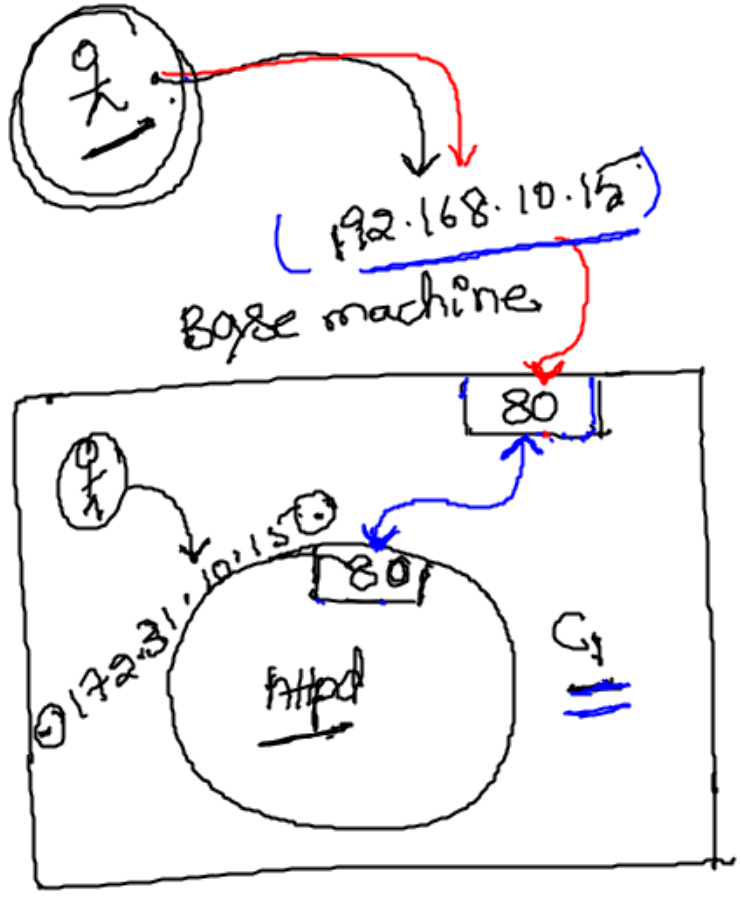
http://192.168.10.15

Hosting Application

port forwarding

-p Basemk port : container port

-p 8080 : 80



http://192.168.10.15

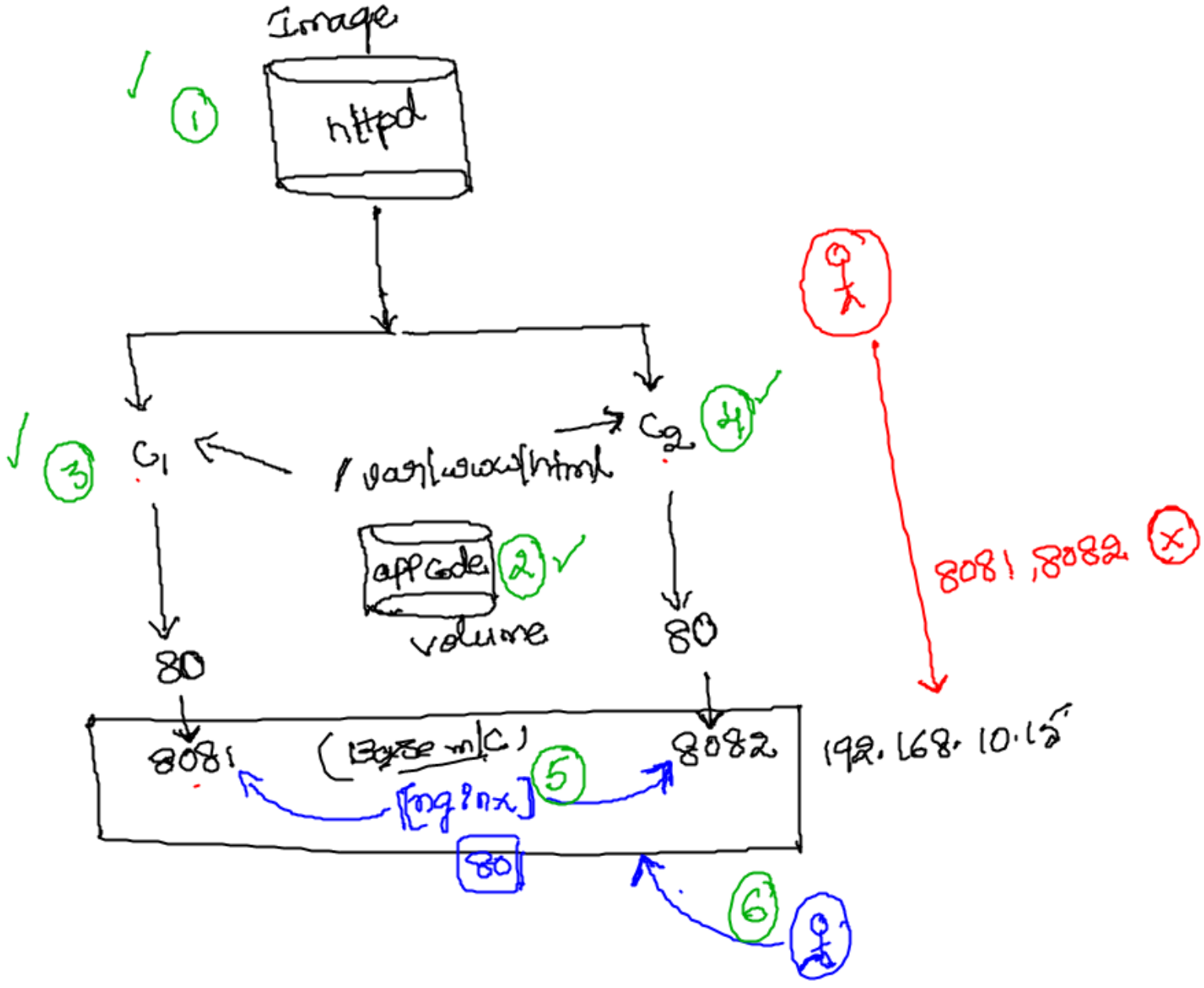
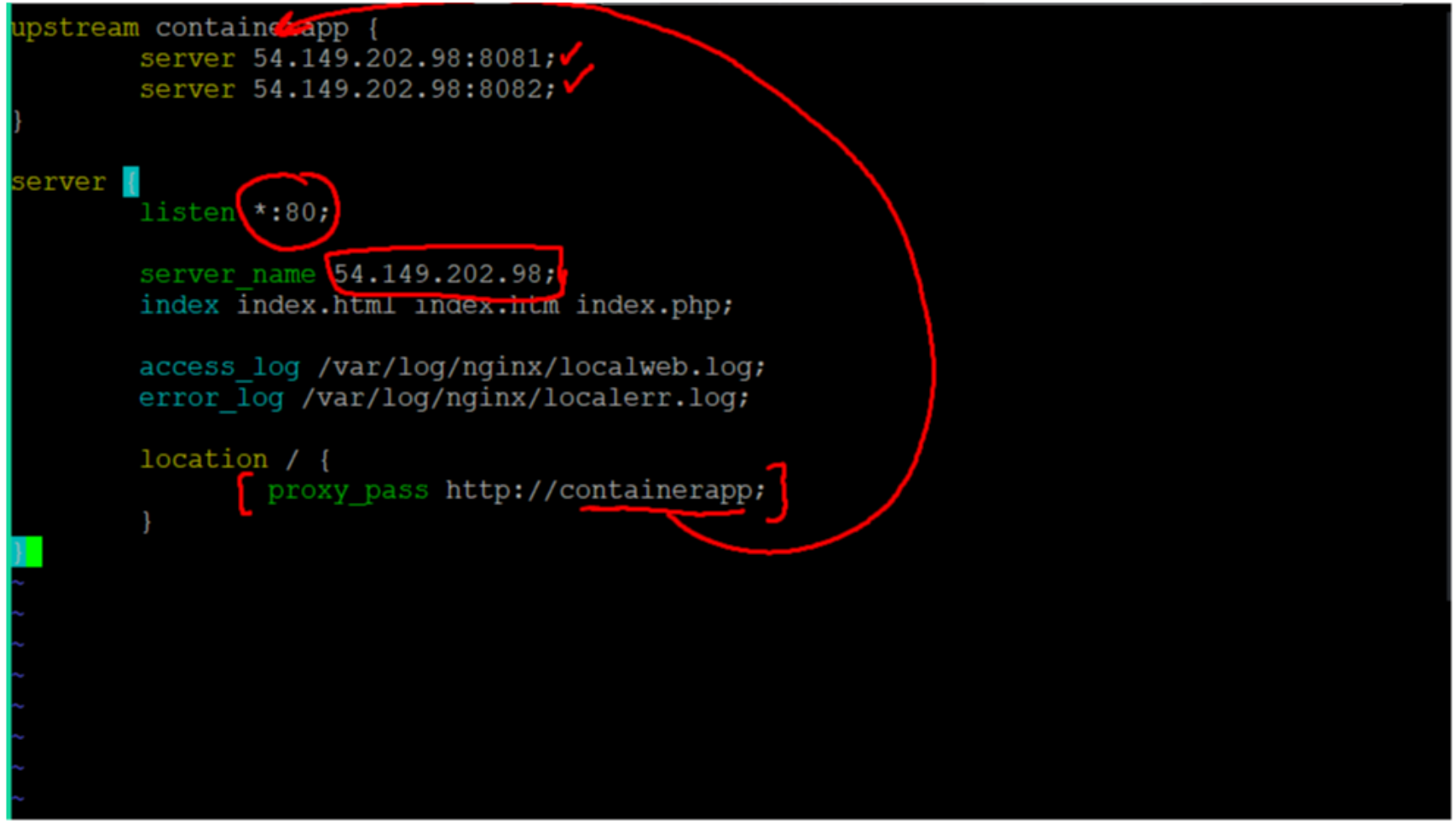
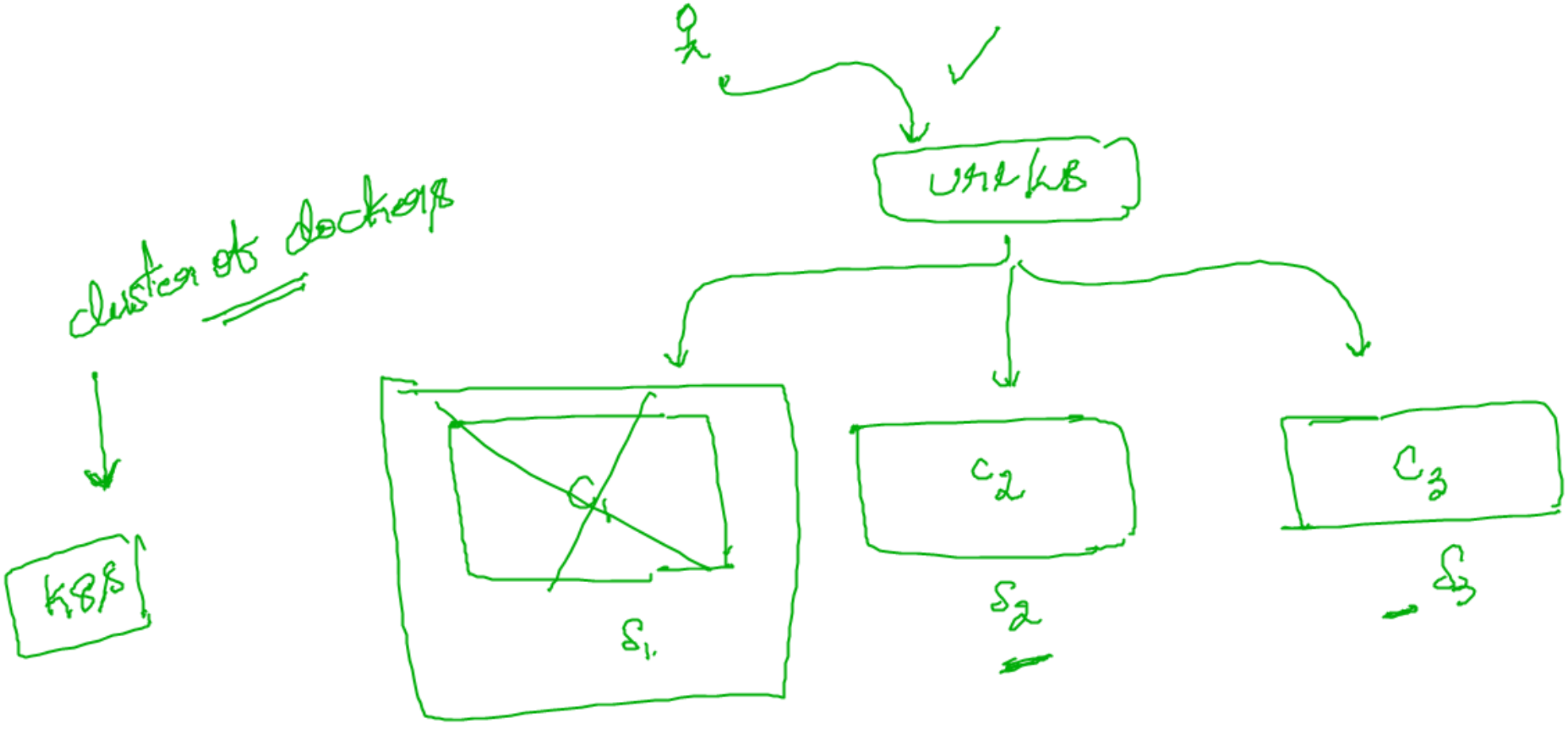


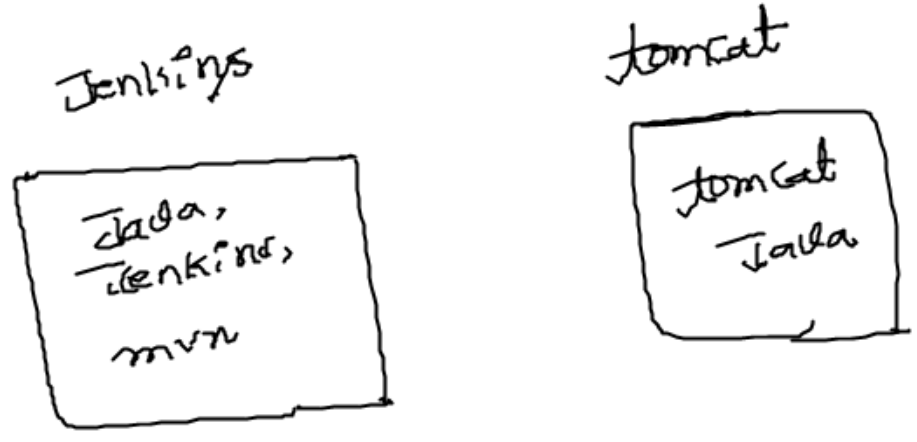
Image
1
httpd
3
C1
/var/www/html
C2
4
appCode
2
volume
80
80
8081
(Base m/c)
8082
5
[ng?nx]
80
6
8081, 8082
192.168.10.15


upstream containerapp {
server 54.149.202.98:8081;
server 54.149.202.98:8082;
}
server {
listen *:80;
server_name 54.149.202.98;
index index.html index.htm index.php;
access_log /var/log/nginx/localweb.log;
error_log /var/log/nginx/localerr.log;
location / {
proxy_pass http://containerapp;
}
}


cluster of dockers
K8S
C1
C2
C3
S1
S2
S3

Java Based Appn

Jenkins



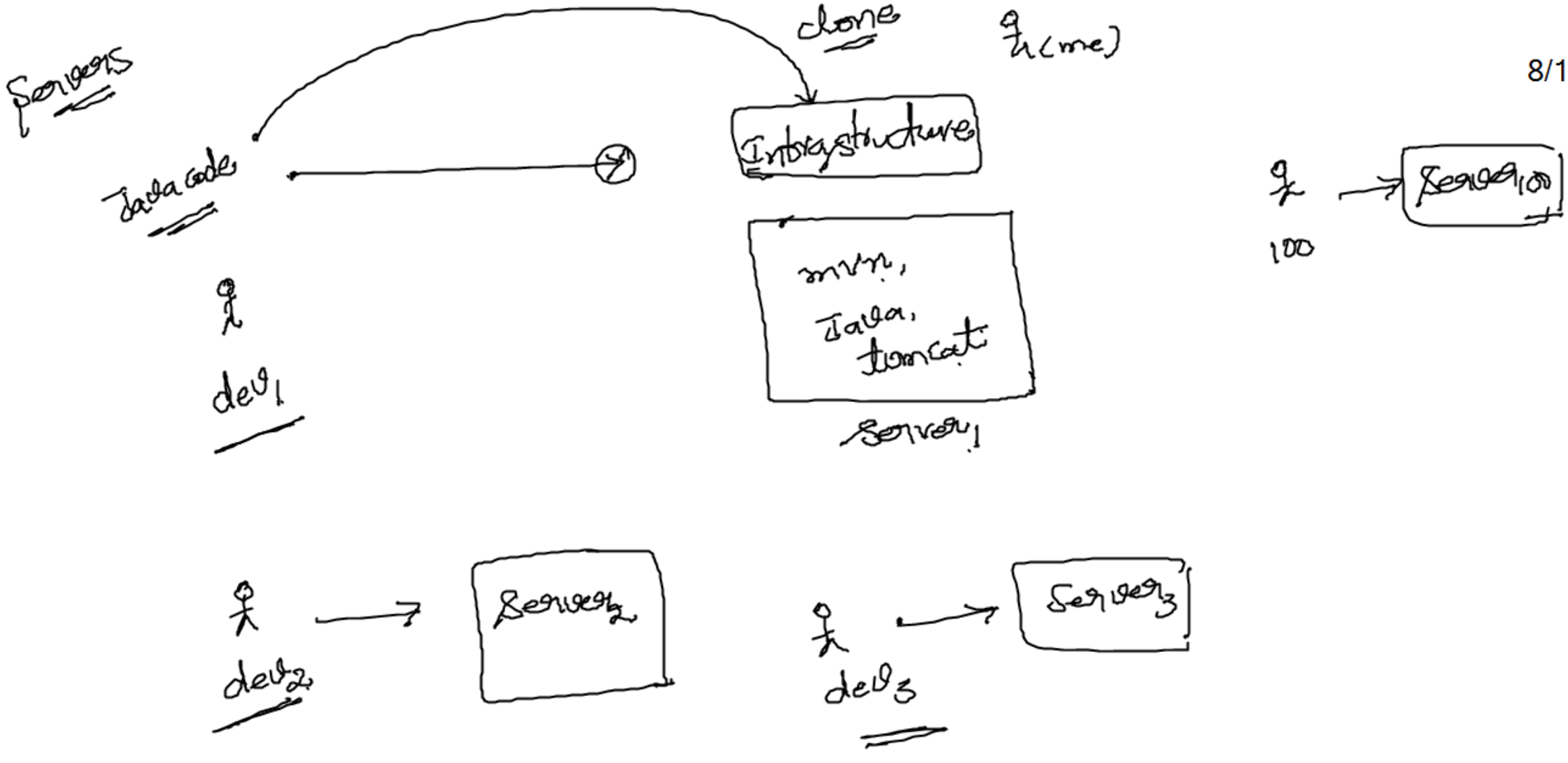
Java,
Jenkins,
mvn

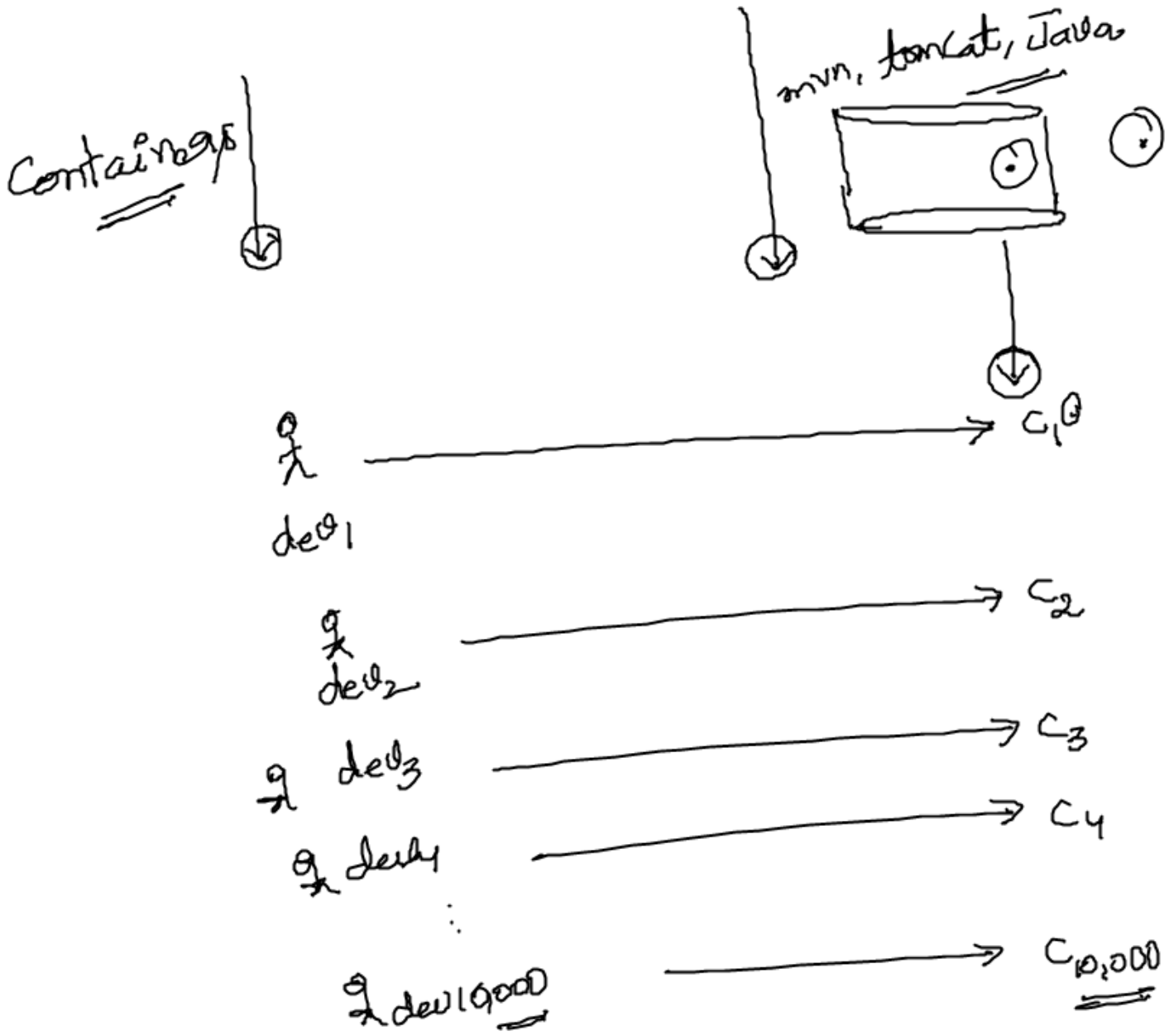
tomcat

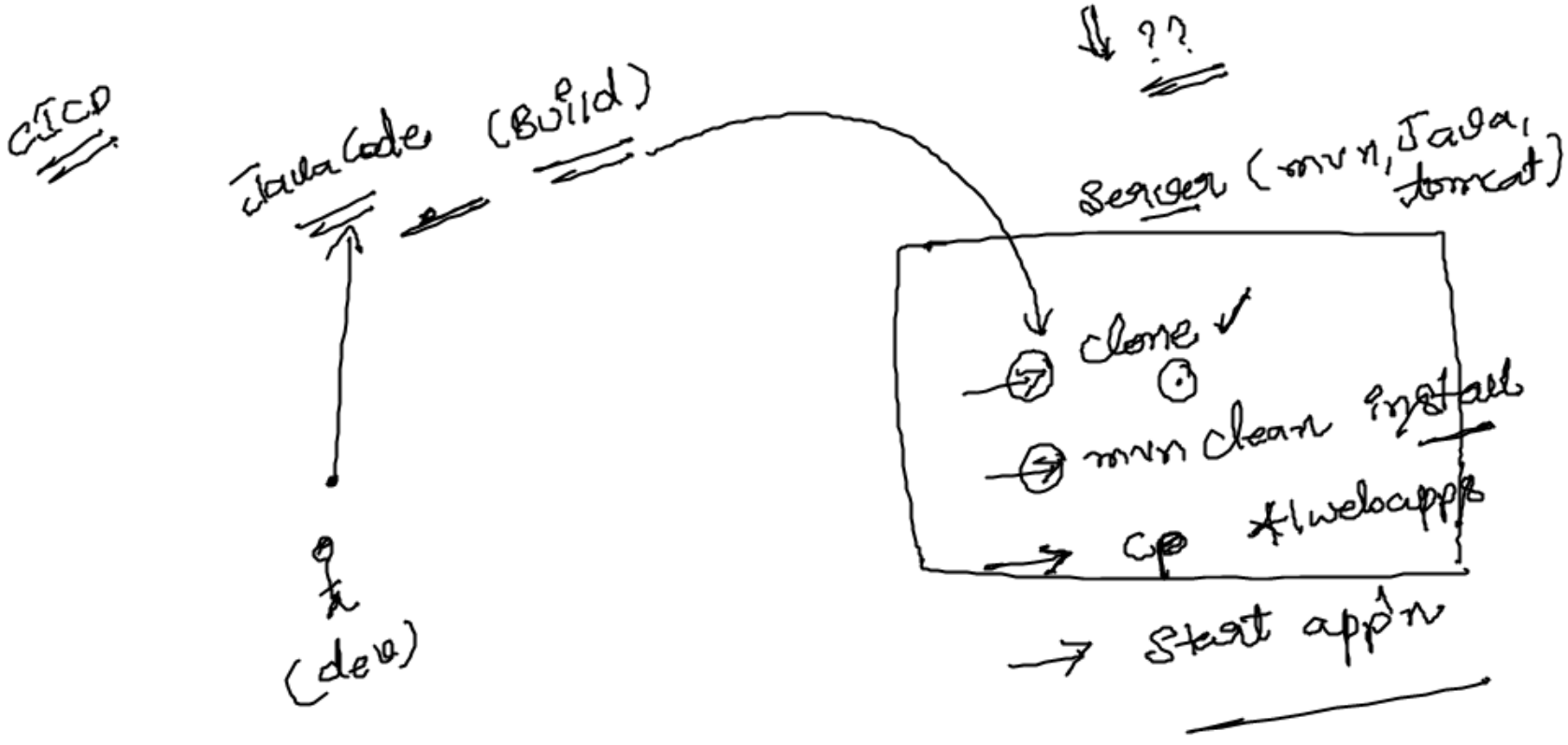
tomcat
Java

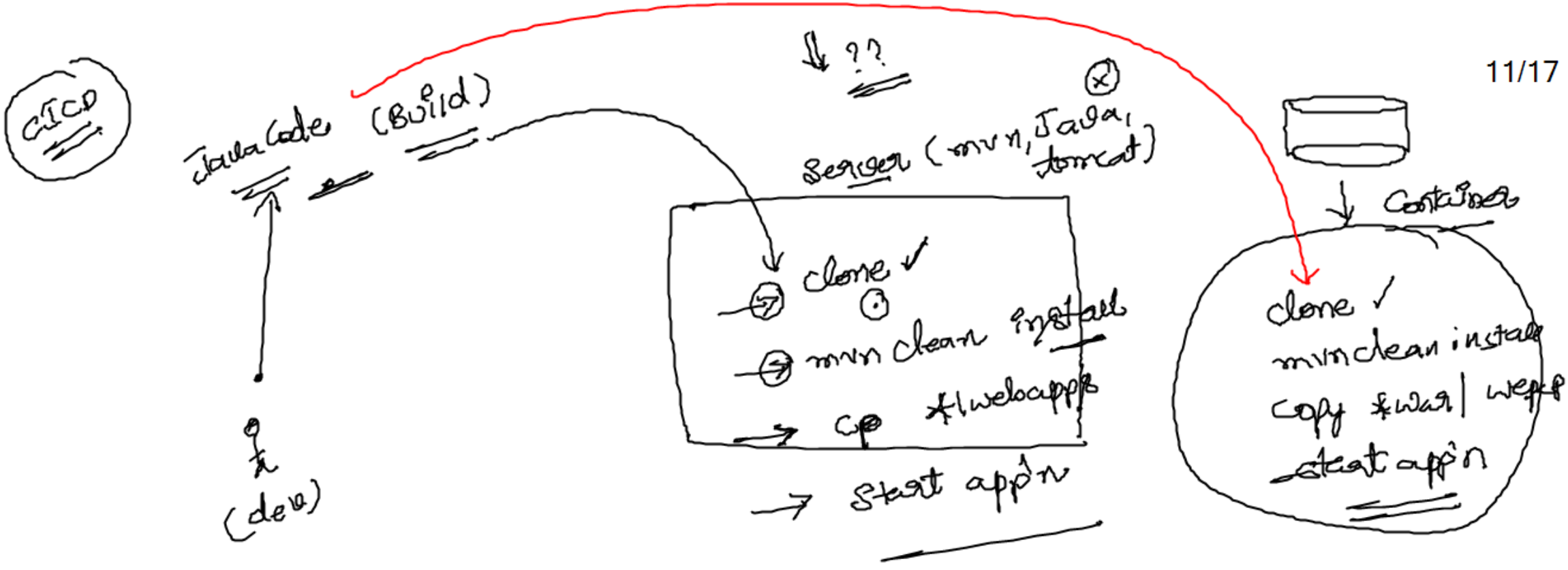
overall dis ⟹ { Java, mvn, tomcat }

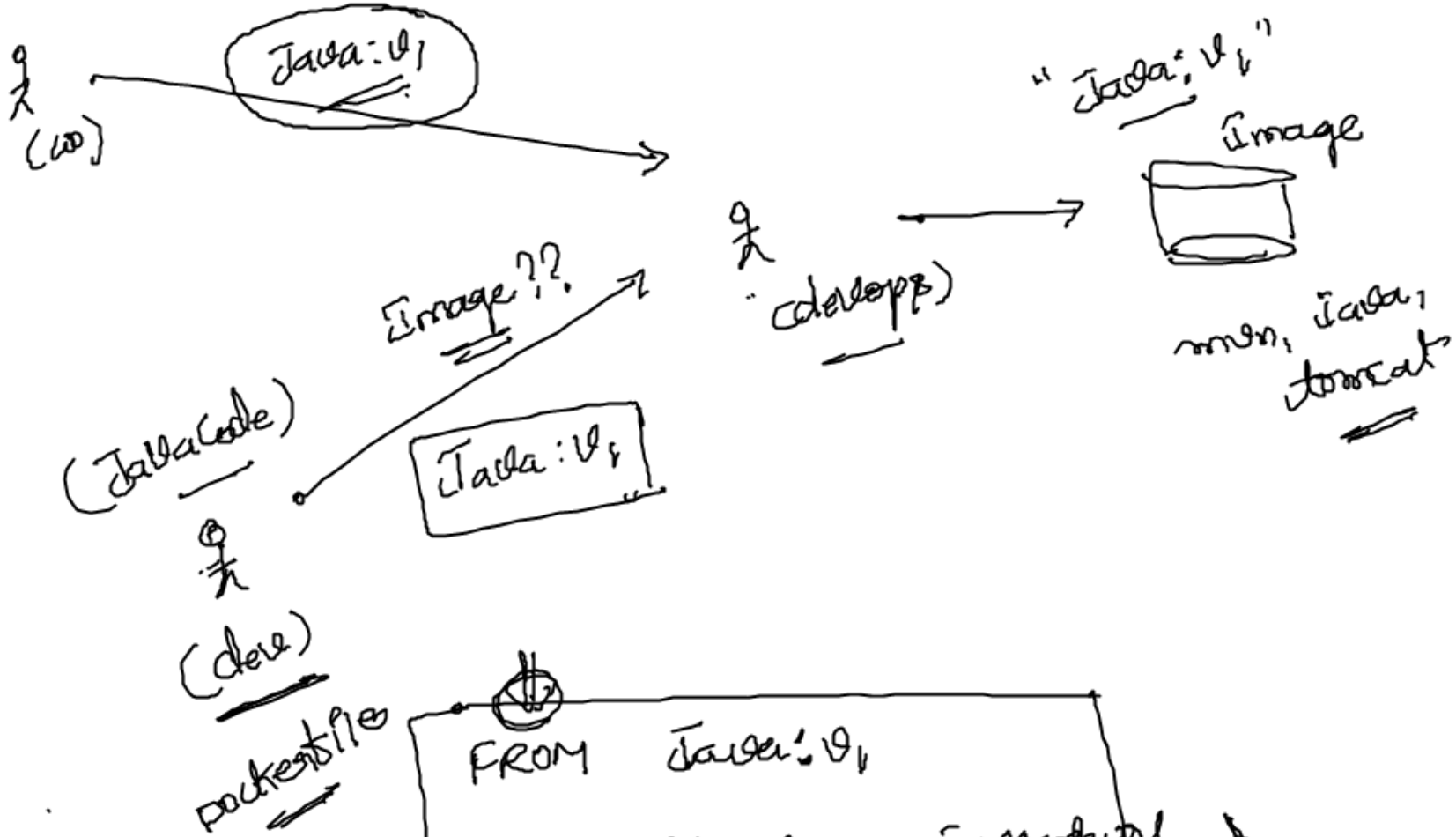
Run Java appn


Servers
clone
git (me)
Java code
Infrastructure
mvn,
Java,
tomcat
Server1
dev1
git
100
Server100
dev2
Server2
dev3
Server3


Containers
mvn, tomcat, Java
C1
dev1
C2
dev2
C3
dev3
C4
dev4
dev10000
C10,000

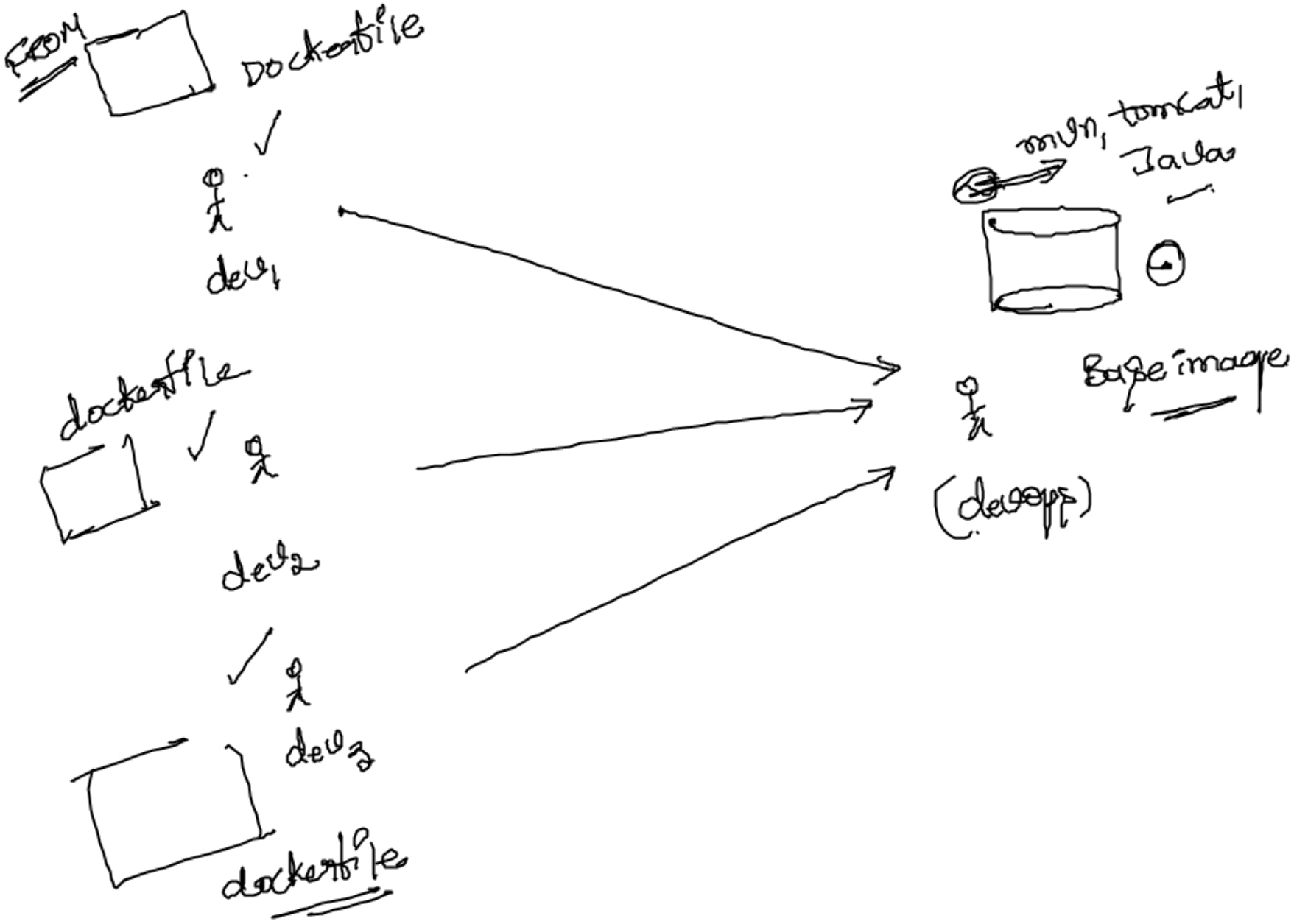

CICD
Java Code (Build)
??
Server (mvn, Java, tomcat)
clone
mvn clean install
cp *.war webapps
start app'n
(dev)

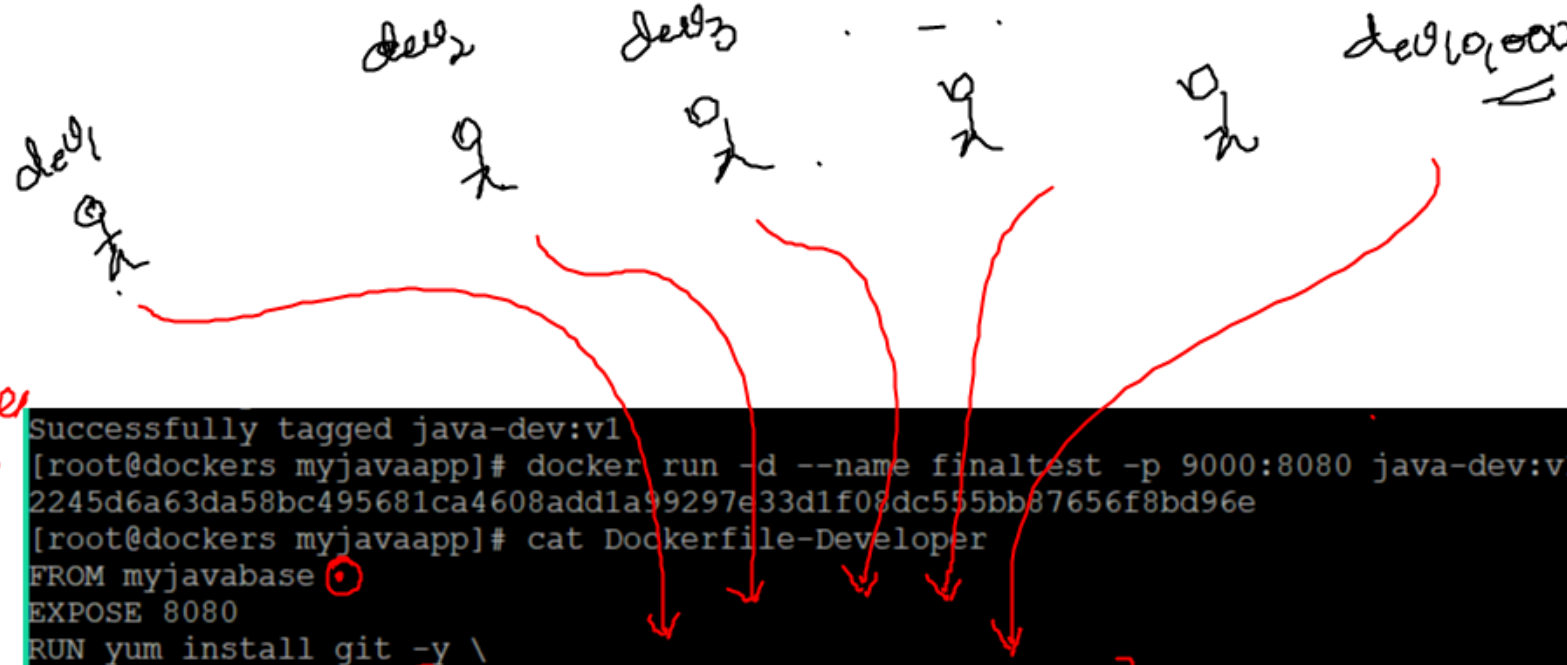

CICD
Java Code (Build)
??
Server (mvn, Java, tomcat)
Container
clone ✓
mvn clean install
cp *.war webapps
start app'n
clone ✓
mvn clean install
copy *.war | webapps
start app'n
(dev)



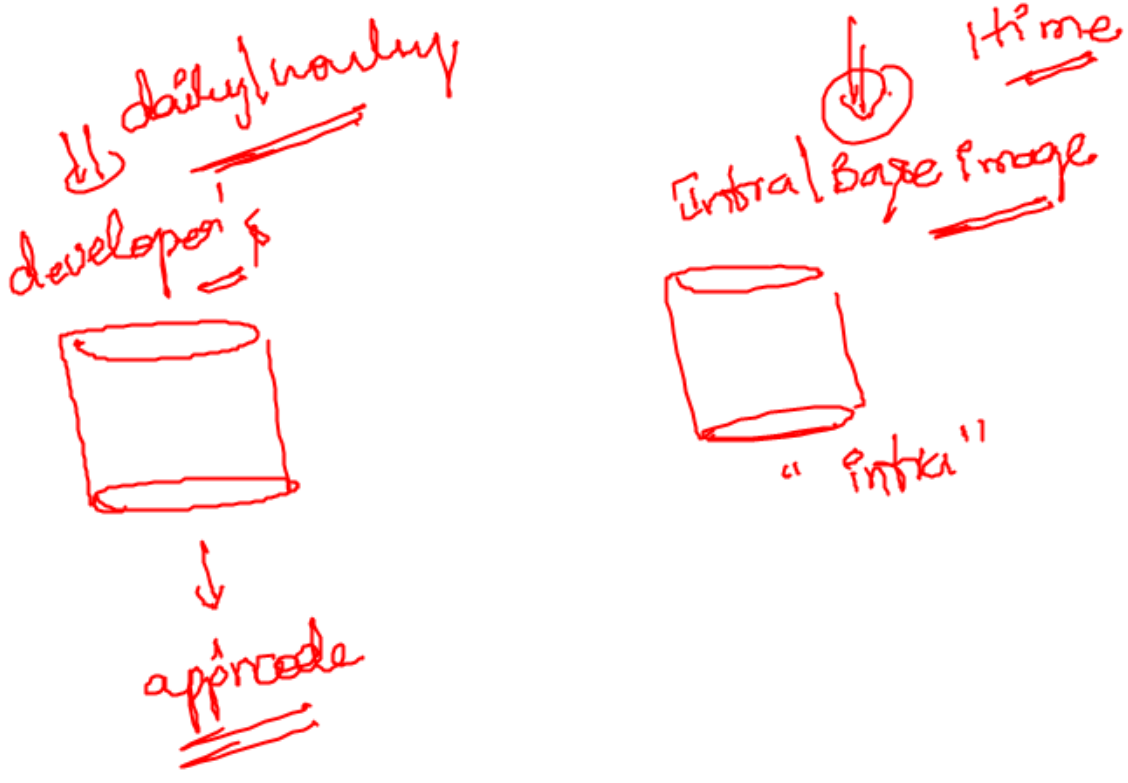

```
FROM Java: v1

RUN git clone javacode.url
    && cd folder
    && mvn clean install
    && cp *war tomcat/webapps
CMD [ ]
```


from
Dockerfile
dev1
maven, tomcat, Java
Base image
dockerfile
dev2
(devops)
dev3
dockerfile




```
Successfully tagged java-dev:v1
[root@dockers myjavaapp]# docker run -d --name finaltest -p 9000:8080 java-dev:v1
2245d6a63da58bc495681ca4608add1a99297e33d1f08dc555bb87656f8bd96e
[root@dockers myjavaapp]# cat Dockerfile-Developer
FROM myjavabase
EXPOSE 8080
RUN yum install git -y \
        && git clone https://github.com/shan5a6/myweb.git \
        && cd myweb \
        && mvn clean install \
        && cp ./target/*.war /opt/tomcat/webapps/
CMD ["/opt/tomcat/bin/catalina.sh", "run"]
[root@dockers myjavaapp]#
```


daily/nonlay
developer's
appcode
Intra/Base image
Time
"intra"

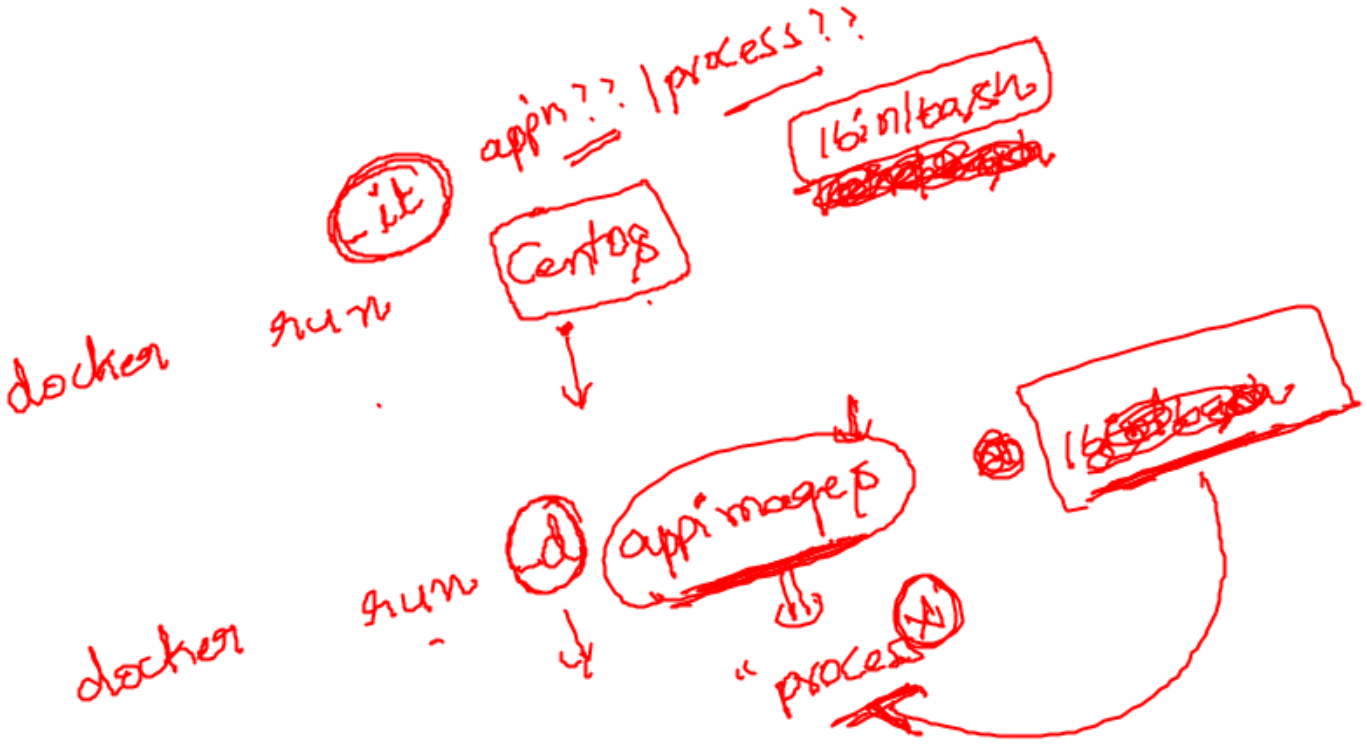
docker pull lekhrai.ua-u/centos

docker tag youimagename

Jenkins

lekhrai-nexus.com/Java:v1

1. clone
2. Build
3. tag
4. push image


appn?? |process??
|bin|bash
-it
Centos
docker run
-d
appimages
docker run
"process