**Simple DevOps Project -3**

1. Launch an EC2 instance for Docker host
2. Install docker on EC2 instance and start services

yum install docker

service docker start

1. create a new user for Docker management and add him to Docker (default) group

useradd dockeradmin

passwd dockeradmin

usermod -aG docker dockeradmin

1. Write a Docker file under /opt/docker

mkdir /opt/docker

### vi Dockerfile

# Pull base image

From tomcat:8-jre8

# Maintainer

MAINTAINER "valaxytech@gmail.com"

# copy war file on to container

COPY ./webapp.war /usr/local/tomcat/webapps

1. Login to Jenkins console and add Docker server to execute commands from Jenkins  
   Manage Jenkins --> Configure system --> Publish over SSH --> add Docker server and credentials
2. Create Jenkins job

A) Source Code Management  
Repository : <https://github.com/ValaxyTech/hello-world.git>  
Branches to build : \*/master

B) Build Root POM: pom.xml  
Goals and options : clean install package

C) send files or execute commands over SSH Name: docker\_host  
Source files : webapp/target/\*.war  
Remove prefix : webapp/target  
Remote directory : //opt//docker  
Exec command : docker stop valaxy\_demo; docker rm -f valaxy\_demo; docker image rm -f valaxy\_demo; cd /opt/docker; docker build -t valaxy\_demo .

D) send files or execute commands over SSH  
Name: docker\_host  
Exec command : docker run -d --name valaxy\_demo -p 8090:8080 valaxy\_demo

1. Login to Docker host and check images and containers. (no images and containers)
2. Execute Jenkins job
3. check images and containers again on Docker host. This time an image and container get creates through Jenkins job
4. Access web application from browser which is running on container <docker\_host\_Public\_IP>:8090