Steps for Case Study

Step 1: Create “empdb” container, which will contain “MySQL” database.

1. Pull MySQL image from docker hub.

**docker pull mysql:latest**

1. Create a directory in the host where you are running docker daemon using “mkdir” command
2. Run the docker container using the following command

**docker run -d -e MYSQL\_ROOT\_PASSWORD=abcd1234 --name empdb --net awsecs -p 3306:3306 -v /home/ec2-user/mysql-db-store/:/var/lib/mysql mysql:latest**

1. Use **“docker container inspect”** command to check the bind mount, exposed ports, network etc.
2. Create “requirements.txt” file (Only for Python)
3. Create “Dockerfile” for both the applications. Mentioned below:
4. Build image. CD to the directory where your application programs and Dockerfile contains

**docker image build -t addemp:latest ./**

**docker image build -t getemp:latest ./**

1. Run Containers using the following commands. Notice the “DBHOST” environment variable, we are not passing the IP address, rather we are passing the container name, this is possible because all of them are running in the same network.

**docker run -d -e DBHOST="empdb" -e DBPORT="3306" -e DBUSER="root" -e DBPWD="abcd1234" -e DATABASE="awsecs" --name addemp --net awsecs -p 80:80 addemp:latest**

**docker run -d -e DBHOST="empdb" -e DBPORT="3306" -e DBUSER="root" -e DBPWD="abcd1234" -e DATABASE="awsecs" --name getemp --net awsecs -p 8080:8080 getemp:latest**

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