<https://www.pipservices.org/docs/tutorials/microservice-dockerization/microservice-dockerization-main>

<https://wwu-pi.github.io/tutorials/lectures/acse/095_tutorial_docker.html>

<https://www.javainuse.com/devOps/docker/docker-jar>

Java Program

Step 1 : (Creating a Java Program) [Using IDE/ Notepad]

HelloWorld.java

Public class HelloWorld {

Public static void main (String args[]) {

System.out.println(“Hello World”);

}

}

Step 2: Compiling and converting to the .class file

Javac HelloWorld.java

Step 3: Running Java program

Java HelloWorld

Dependencies – JVM, JAVA Compiler (JDK - JRE)

To create a Docker image, we need Dockerfile (It will not have any extension)

FROM java:8

COPY . /var/www/java

WORKDIR /var/www/java

RUN javac HelloWorld.java

CMD ["java", "HelloWorld"]

docker build -t docker-java-app .     --- [For a Stand-alone application port mapping is not needed]

For Web/MicroService Port mapping is important

Port Mapping

Docker – Light weight Virtual Machine [ A virtual computer created by software only]

Windows PC – HOST operating System is Windows

Linux Laptop --- Host Operating System is Linux

MacBook – Host Operating System is Mac

Simple-client 8080:8080

Wwupi/simple-client 9990:9990

Simple-server 8080:8081

Wwupi/simple-server 9990:9991

docker container run **--name eureka** -p 8761:8761 -d eureka-server