
Create a new image and run it in a container

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Step 1 – Download the project to play with

Down the zip-file Ex2-2_HelloWorld.zip from Itslearning. It's a very simple Maven-built hello-word Java project. Note that the project has been set up to use Java 21.

Step 2 – Build the project

Build the project by executing the Maven goal called `package`. That means you end up with a new folder called `target`, and inside that there's an executable jar-file called `HelloWorld-1.0-SNAPSHOT.jar`. Check that for yourself.

Step 3 – Create a Dockerfile

Now you must create a new file in the top of the project called `Dockerfile`. This Dockerfile should wrap the executable jar-file inside an image based on the Docker Hub image `eclipse-temurin:21`. That way you can be sure that the jar-file gets run with the right version of Java JRE. Hint: You should probably look at one or more of the slides from today.

Step 4 – Start a terminal and change the working dir to your project

Start Linux in a Windows Terminal and change into your project by a command like this:

```
cd /mnt/c/Users/stek/JavaProjects/SEP6/HelloWorld/
```

The exact path depends on your Windows login name and the folder layout you are using (i.e. White have you put the project).

Step 5 – Create your image

Once your Dockerfile is ready use this command in the terminal to build your image:

```
docker build -t helloworld-image .
```

Step 6 – Run your image in a container

When you have built your image you can run it in a container by using these commands in the terminal window:

```
docker run --name mycontainer -t helloworld-image
```

You can run the container multiple times by typing the command

```
docker start -i mycontainer
```