

# Java Docker Build and Run Setup

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This repository provides a Docker setup for building and running a Java application inside a container. The application is built using Maven and We also use external Jars files that store in the **libs** directory

## Project Structure

```
/my-java-app
├── Dockerfile
├── README.md
├── src/
├── libs/      <-- External libraries (if any)
└── pom.xml
```

## Dockerfile Overview

The Dockerfile performs the following tasks:

### 1. Build Stage:

- Uses a base image with Maven and JDK installed.
- Copies your source code into the container.
- Runs **mvn clean package** to build the Java application and generate the JAR file in the **target** folder.

### 2. Runtime Stage:

- Copies the generated JAR file from the build stage to the runtime image.
- Copies libs (with all the dependencies) folder into the runtime image
- Sets the entry point to run the Java application.

## Building the Docker Image

1. Ensure Maven is installed and configured.
2. Build the image using the following command:

Give desired name to your image

```
docker build -t my-java-app .
```

3. Once the image is built, run it:

```
docker run my-java-app
```

