Docker for developers in Java

Course code: JAVADOCKER

The course focuses on wrapping a Java application inside a Docker image and then running it inside a Docker container. Next we will look at the benefits of Native applications and last but not least the production setup, where applications usually run in a Kubernetes environment.

h4 id="required-input-knowledge">Required input knowledge
- The course assumes knowledge and experience with programming in Java at the level of the JAVAPROG2 course

Teaching methods
- Expert explanation with practical examples, exercises on computers.

Studying materials
- Printed presentations of the subject matter.

Course syllabus
Docker &Java app
- Correct Docker image with Java
- --Memory settings and related Java support
- Multi-stage builds

Dockerizing the Spring Boot application
- Using JIB plugin
- Using Paketo buildpack
- Using the Fabric8 Maven plugin
- Layered image
- Distroless image
- Variable settings

Spring Native / Quarkus
- Native applications
- Build Native applications into Docker container

Dockerizing the WAR application
- Docker &Tomcat

Production settings
- Spring Boot Actuator &healthcheck / liveness &readiness probe
- Spring Cloud Kubernetes