Spring Boot Microservices

Beginner to Guru

Building Docker Images with Maven

Building Docker Images with Maven

- Maven can be configured to build and work with Docker images
- Capability is done with Maven plugins
- Several very good options available
- Will be using Fabric8's Maven Docker Plugin - (pronounced fabricate)
  - Very versatile plugin w/rich capabilities - only using for build
  - Fabric8 is a DevOps platform for Kubernetes and Openshift - worth becoming more familiar with

Docker Integration

- The Maven plugins work with Docker installed on your system
  - Generally, will auto detect the Docker daemon
  - This can be different depending on your operating system
- If Fabric8 cannot connect to Docker you may need to configure the plugin
  - Under the Maven POM properties element:
    - Set property “docker.host” for your operating system

Building Docker Images with Maven

- For microservices using common BOM
  - Fabric8 is configured in parent
  - Each service will need a Dockerfile in /src/main/docker
- For microservices NOT using common BOM
  - Fabric8 will need to be configured in Build element of Maven
  - Each service will need a Dockerfile in /src/main/docker
- Upcoming videos will cover both

Spring Boot Layered Builds

- Layered builds is a new feature with Spring Boot 2.3.0
  - Detailed blog post in course resources
- We will be configuring our builds to perform layered builds
- Services using BOM need to use 1.0.17 or higher
- Services not using BOM need to use Spring Boot 2.3.0 or higher

Publishing to Docker Hub

- If you've created a Docker hub account and wish to publish images to your own account:
  - Configure server credentials in settings.xml (User home dir/.m2)
  - In servers element, add server with id of 'docker.io'
  - Add your username and password to respective elements

SPRING FRAMEWORK

GURU