Spring Boot Microservices

Beginner to Guru

Adopting Microservices

Adopting Microservices

- Often applications will start as monoliths
  - Might be because of being older legacy applications
  - Or a development choice
    - Remember there is a ‘cost’ to splitting into microservices
  - Its not uncommon to start development of an application as a monolith
- Monolithic architectures are well established in companies
- Many companies are just starting to adopt Microservices

Decomposing to Services

- Decomposing is the process of taking a larger monolithic application and breaking it up into microservices
- Decomposition is more of an ‘art’ than a science
- Strategies you can use:
  - By Business Capability - ie Order Service
  - By Domain Objects - ie Product Service (services over domain object ‘Product’)
  - By action verbs - Payment Service
  - By Nouns - Customer Service

Single Responsibility Principle

- Single Responsibility Principle (SRP) is a term coined by Uncle Bob Martin about object oriented programming.
  - SRP says a class should have just one reason to change.
  - Meaning your classes should be very specific in what they do
  - Do one thing, and do it very well
- SRP can also be applied to microservices
  - Do one thing, and do it very well

Microservices and Development Teams

- Larger organizations might have hundreds of developers
- When possible small teams should be responsible for specific microservices
- This will often lend itself to business functions
  - An account team would work on accounting related services
  - An Customer Order team would work on Customer Order related services
  - An Order Fulfillment team would work on Order Fulfillment related services
- Often you will see a lot of overlap of business domain with the domain of the services

SPRING FRAMEWORK

GURU