

# MicroServices with Spring Cloud

# Topics

- Monoliths vs MicroServices
- MicroServices Architectures
- Exploring Spring Cloud Projects:
  - Spring Cloud Contract
  - Spring Cloud Netflix: Hystrix, Eureka, Ribbon, Feign
  - Spring Cloud Config
- Deploying to Pivotal Cloud Foundry with Spring Cloud Services

# Approach

*Learn by doing*

Aside from the starting application,  
you will be implementing the solution,  
doing all of the coding in each lab

# Journey

- Begin with a sample application
- Extract a MicroService from it
- Discover what happens when the logic is no longer in a single, self-contained application

From this refactoring will emerge the need for:

- Service-to-Service Integration Testing
- Making services less brittle and more tolerant of failures in other services
- Service Discovery
- Service-to-Service Load Balancing
- Centralized Configuration

With each topic, we'll explore a number of Spring Cloud projects that address these needs:

- Spring Cloud Contract
- Spring Cloud Netflix: Hystrix, Eureka, Ribbon, Feign
- Spring Cloud Config

# Deploying the Solution

In the final step in the journey, we will deploy these applications to Pivotal Cloud Foundry (PCF), with the aid of the *Spring Cloud Services* tile for PCF