

Enterprise-Solutions – RTB C10 - MicroService – Advance Level

Manual & Case Study

Skill Manual

Topics To Cover

Objective: Participant should be able to understand various Microservice patterns (Java/Python) with clear concept of Spring Boot, Security, Actuator and Hystrix OR Flask, Flask-JWT and able to differentiate between monolithic Vs. Micro services architecture

Topics to be studied: Please initiate self - study for below mentioned topics:

Milestone 1

- Microservice Introduction
- Implementation Framework (Spring Boot & Spring Security or Flask & Flask-JWT)

Topics To Cover

Milestone 2

- Data & Transaction Management
- API Gateway
- Service Discovery

Topics To Cover

Milestone 3

- Communication Mechanisms (Hystrix/Dashboard circuit breaker OR Resilient/pybreaker)

Topics To Cover

Milestone 4

- Deployment and Integration
- Continues Integration, Delivery and Deployment
- **Start working on Case Study**

Topics To Cover

Milestone 5

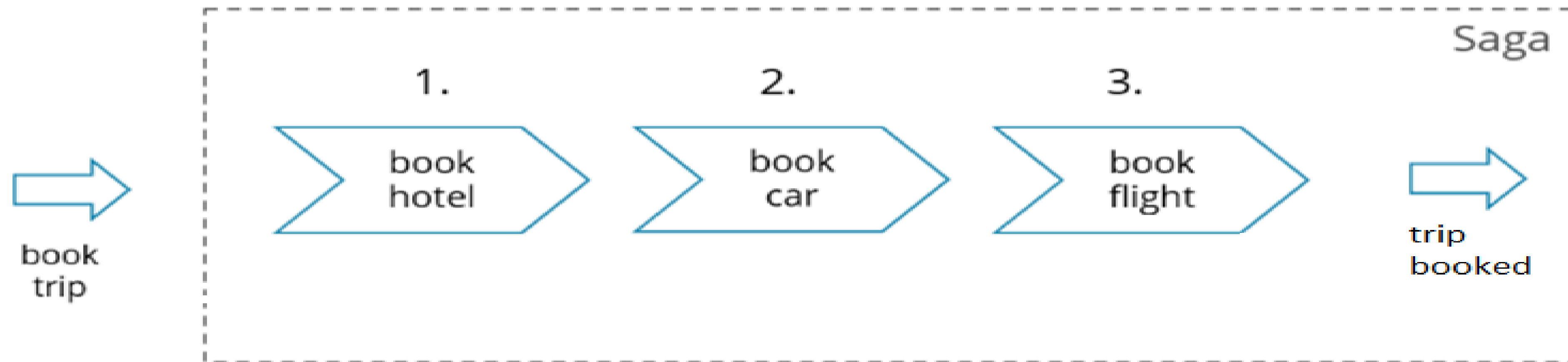
- Monitoring and Logging (using Actuator OR Prometheus)
- Tools Stack
- **Complete Case Study**

Case Study

Problem Statement / Use Case

Developer 3 small micro-services that connects with each other using some broker like Kafka:

- Book Car
- Book Hotel
- Book Flight



Problem Statement / Use Case

- Implement distribute tracing of events across these services using zipkin or ELK or Sentry
- The framework to be used is spring boot/Flask.
- Use spring boot/flask to enable event tracing and add zipkin server or ELK or sentry for holding tracing information.
- Unit tests must be added.

Expectations

- Team Members post the intervention should be able to design and build microservice,
- Contribution in Learning – LMS, preparing questionnaire, ASL, Tech talk, Org training.
- Once you have completed studying the above topics, conduct knowledge sharing session or practically use all these skills in project for architecting or development

Thanks.

For any queries regarding Raise the Bar, you may reach out to your Learning POCs or write to Learning@impetus.com