The QuoteServices App Case Study: Overview

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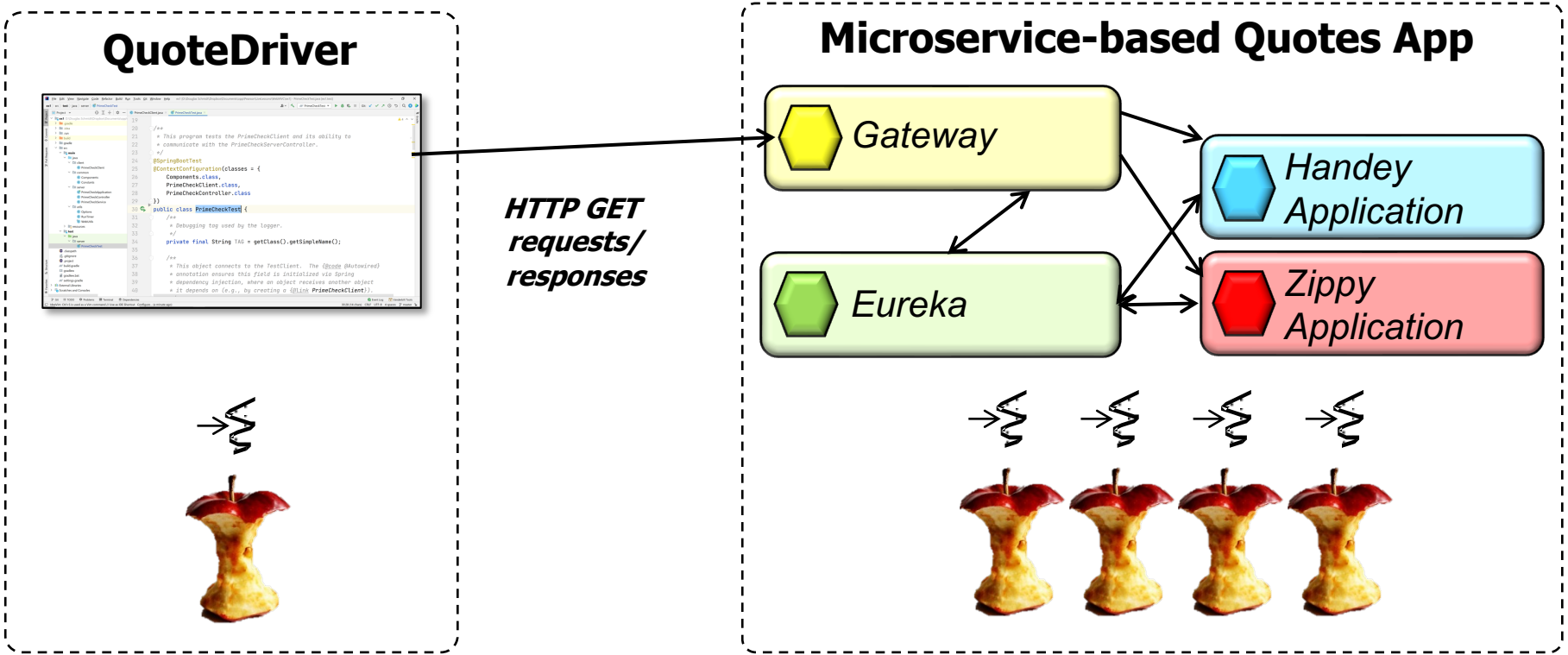
Learning Objectives in this Part of the Lesson

- Understand how various concurrency & persistency frameworks are applied in a case study using Spring WebMVC to provide two different quote services

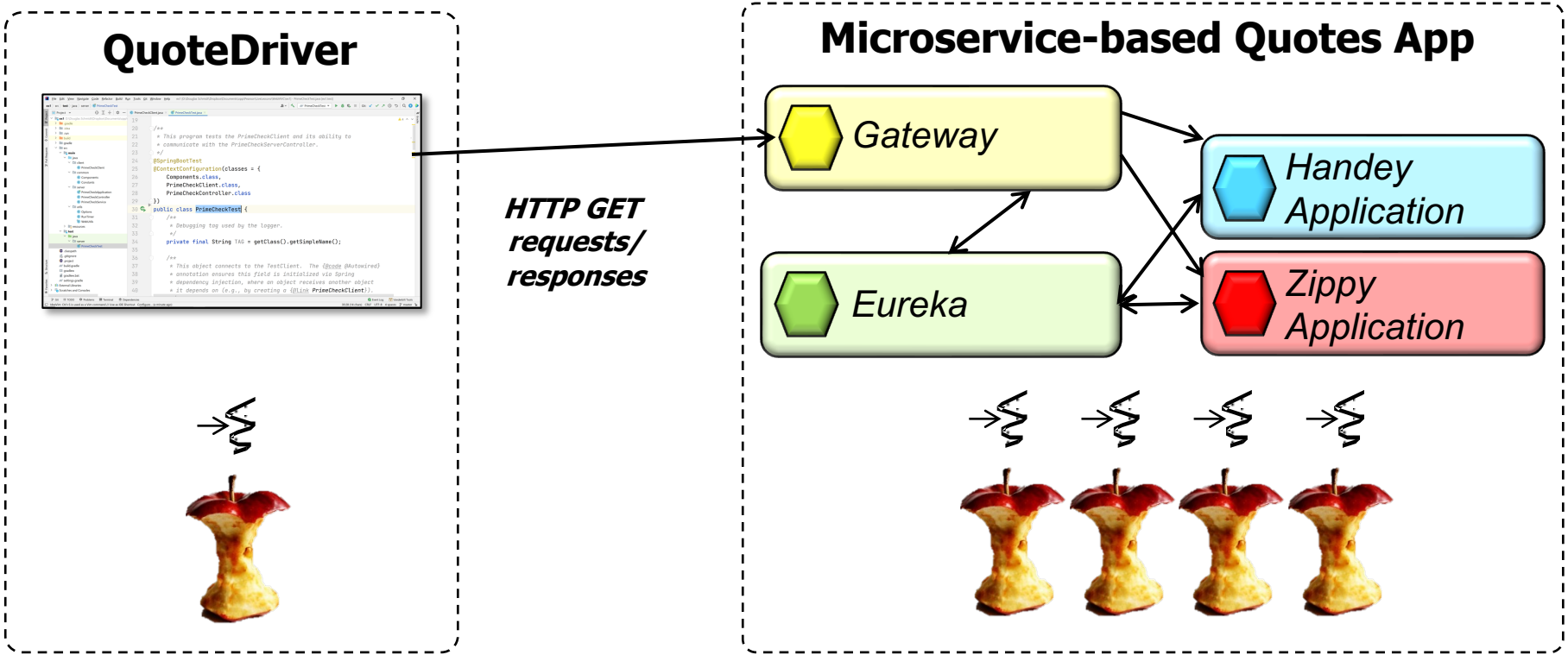


See github.com/douglascraigschmidt/LiveLessons/tree/master/WebMVC/ex4

Overview of the Quote Services App Case Study

Overview of the QuoteServices App Case Study

- This case study shows how Spring WebMVC can send & receive HTTP GET requests synchronously to/from an API gateway & multiple microservices



Also shows how to use the Eureka discovery service

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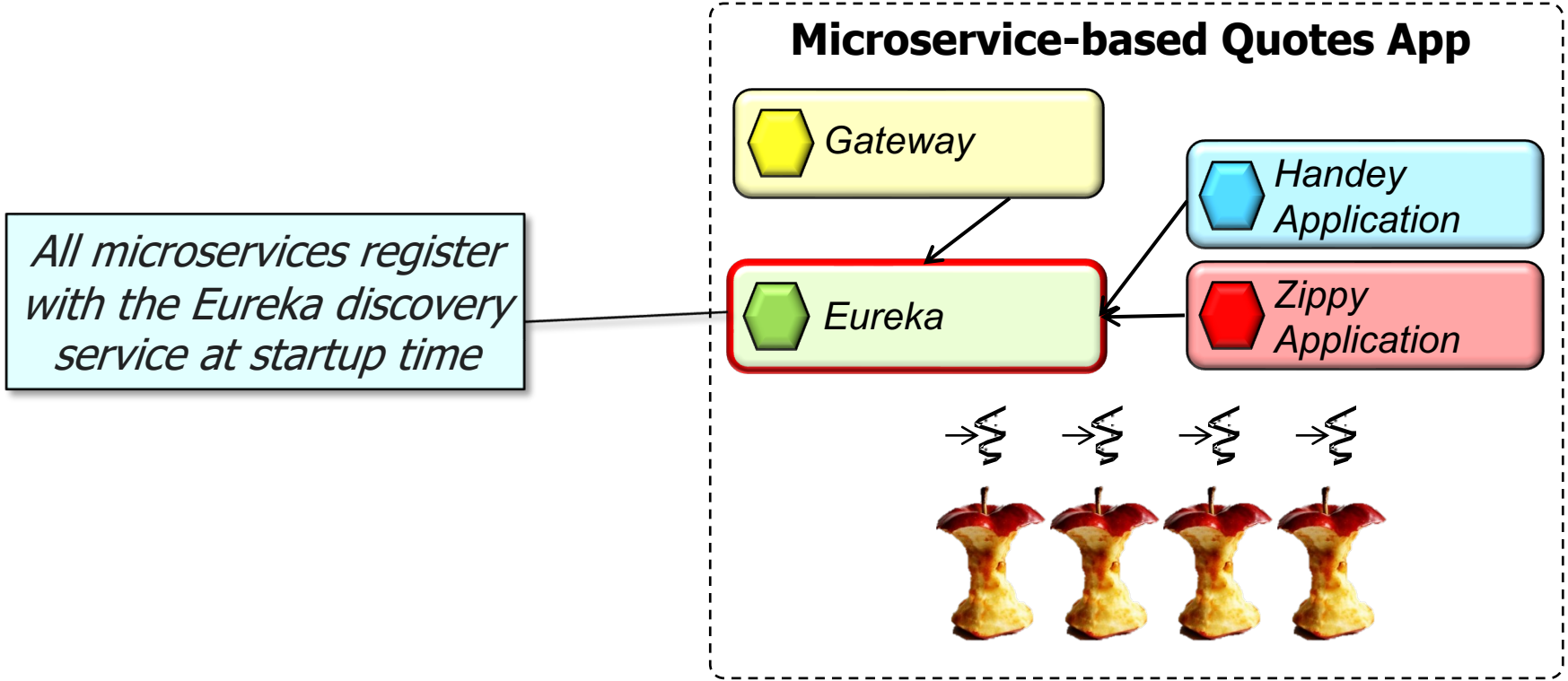

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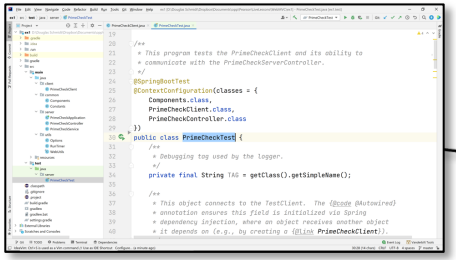
QuoteDriver



The client sends requests to the API gateway (& only the API gateway)

See github.com/douglascraigschmidt/LiveLessons/tree/master/WebMVC/ex4/client

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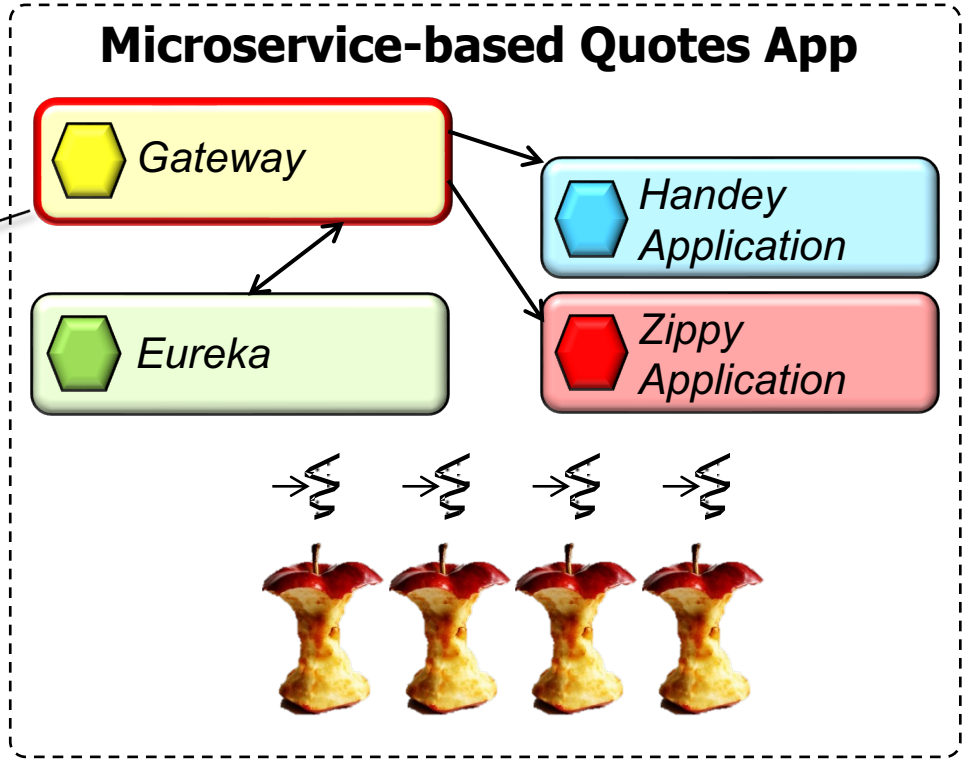

The API gateway receives client HTTP requests & uses the Eureka discovery service to route them to the designated microservice

See github.com/douglascraigschmidt/LiveLessons/tree/master/WebMVC/ex4/gateway

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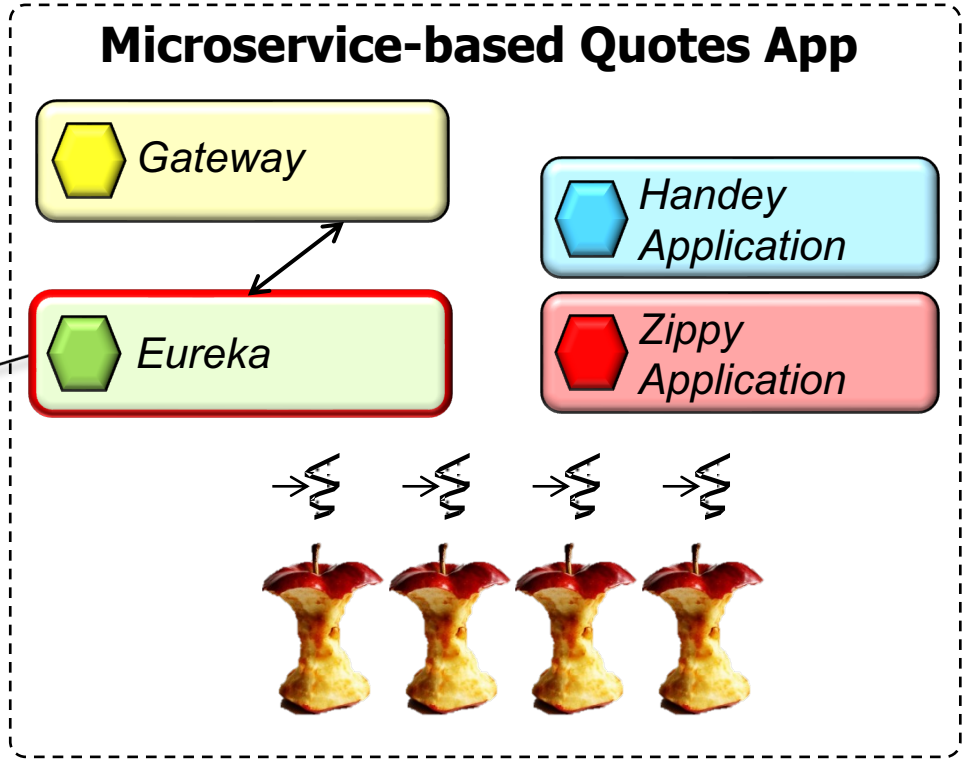

The Eureka discovery service enables the API gateway to find & communicate with the back-end microservices without hard-coding ports & hostnames

See github.com/douglascraigschmidt/LiveLessons/tree/master/WebMVC/ex4/eureka

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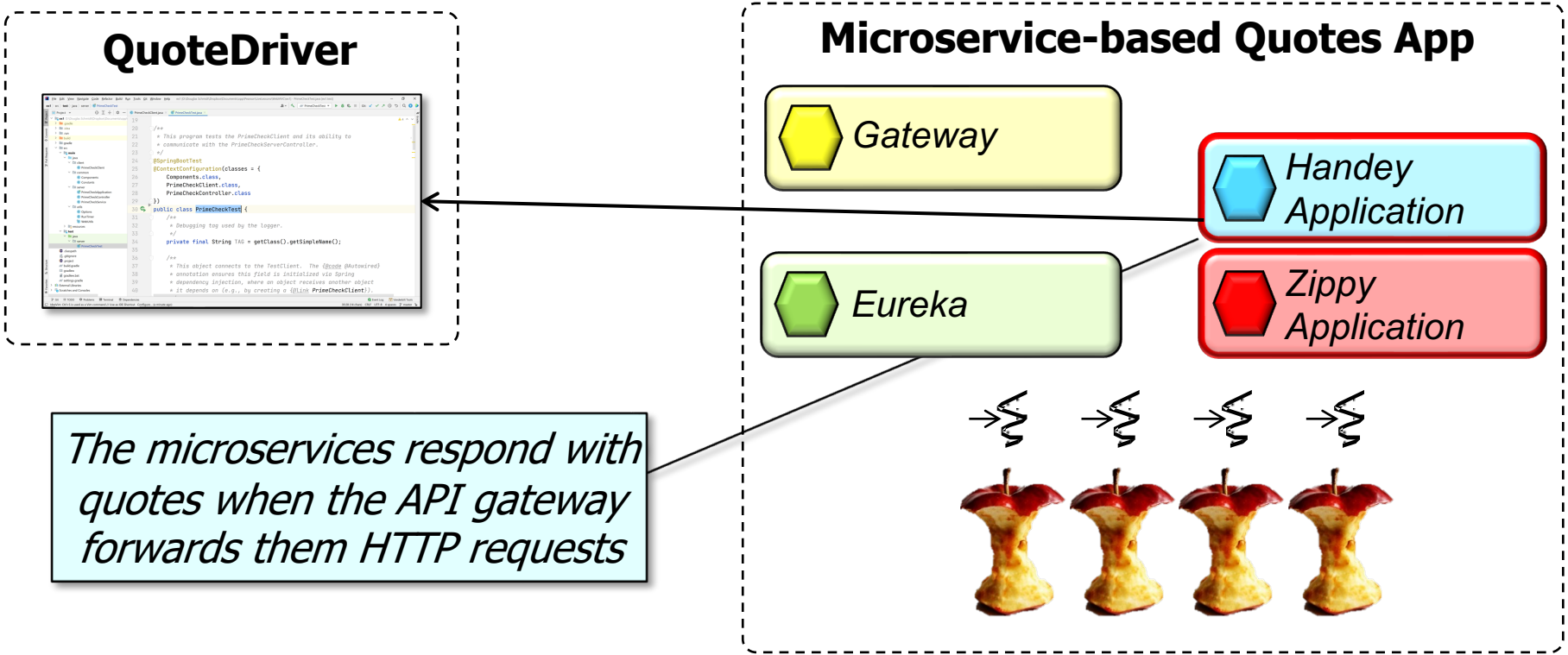

See WebMVC/ex4/microservices

Structure of the Quote Services App Project

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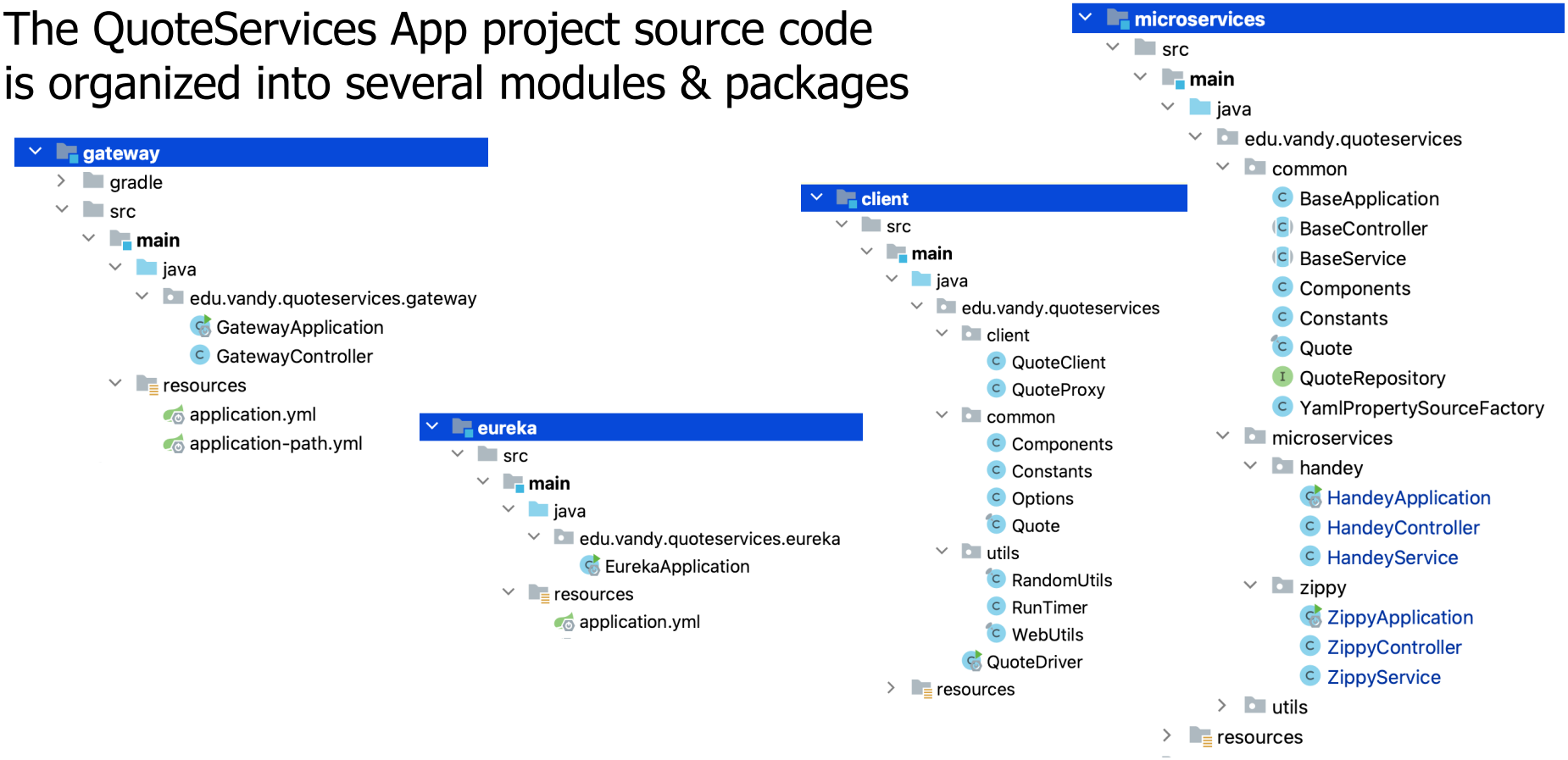
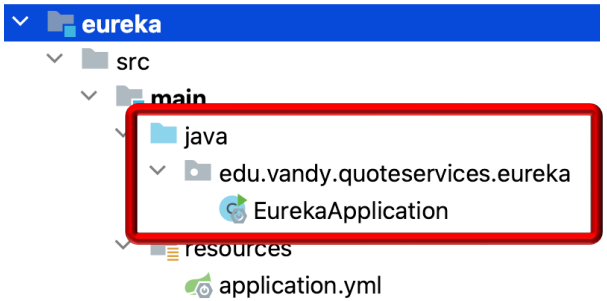
- The QuoteServices App project source code is organized into several modules & packages



See github.com/douglascraigschmidt/LiveLessons/tree/master/WebMVC/ex4

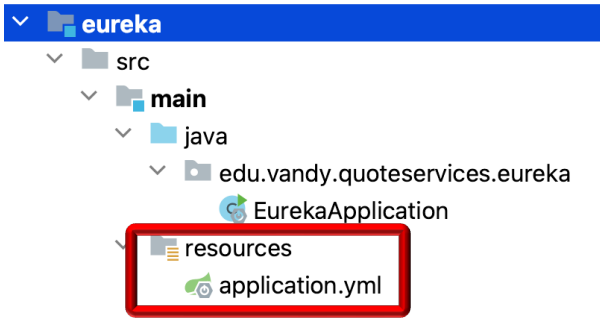
Structure of the QuoteServices App Project

- The QuoteServices App project source code is organized into several modules & packages
  - main
    - eureka
      - Contains the "app" entry point



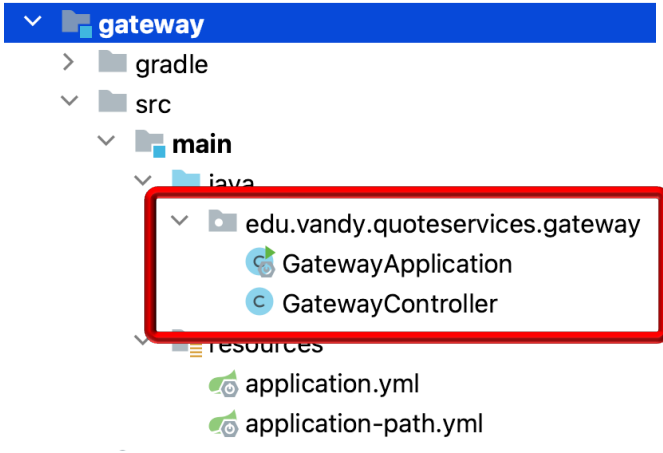
Structure of the QuoteServices App Project

- The QuoteServices App project source code is organized into several modules & packages
  - main
    - eureka
    - resources
      - Define the port number listened on by the Eureka discovery service & other properties



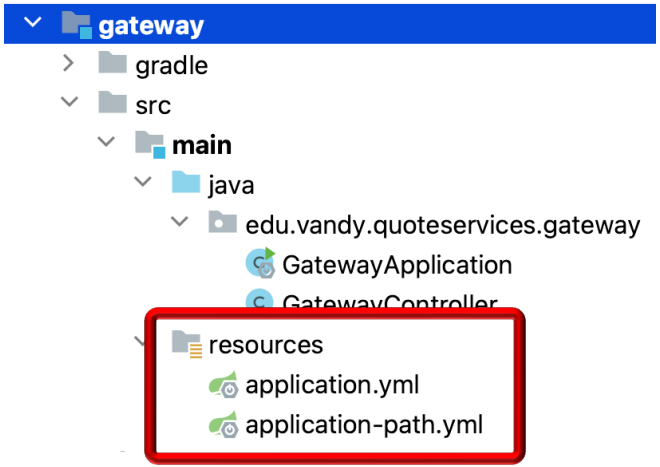
Structure of the QuoteServices App Project

- The QuoteServices App project source code is organized into several modules & packages
  - main
    - gateway
      - Contains the "app" entry points & the controller



Structure of the QuoteServices App Project

- The QuoteServices App project source code is organized into several modules & packages
  - main
    - gateway
    - resources
      - Specifies the port numbers & microservices exposed by the API gateway



Structure of the QuoteServices App Project

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  - main
    - microservices
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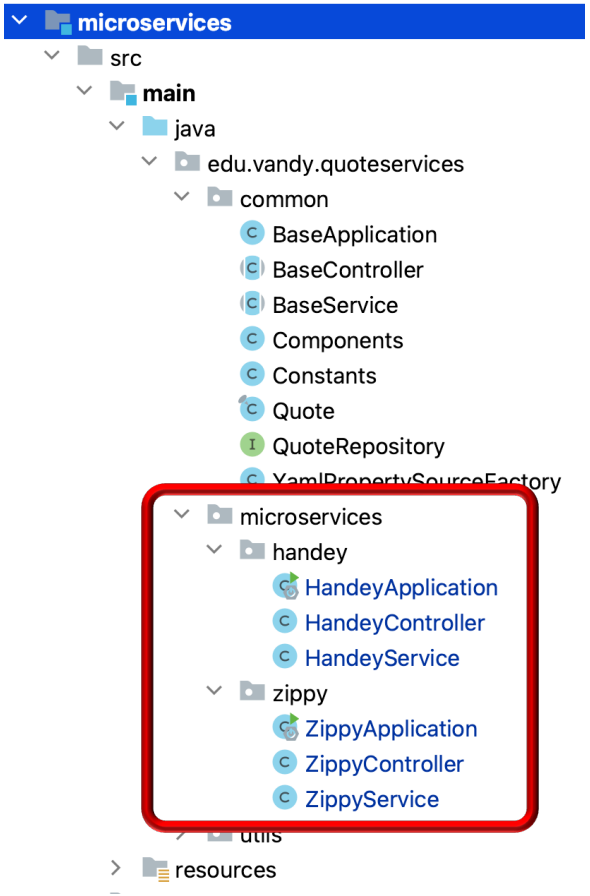
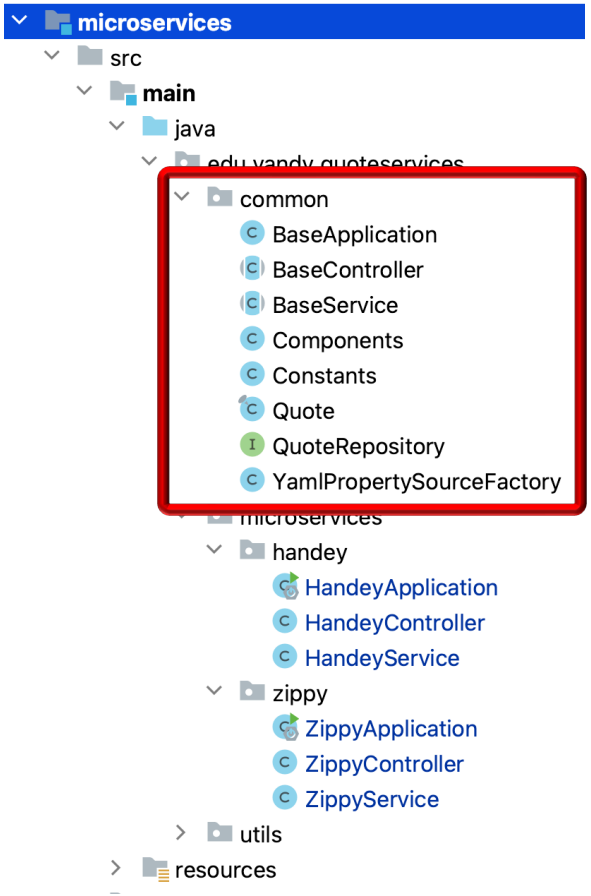


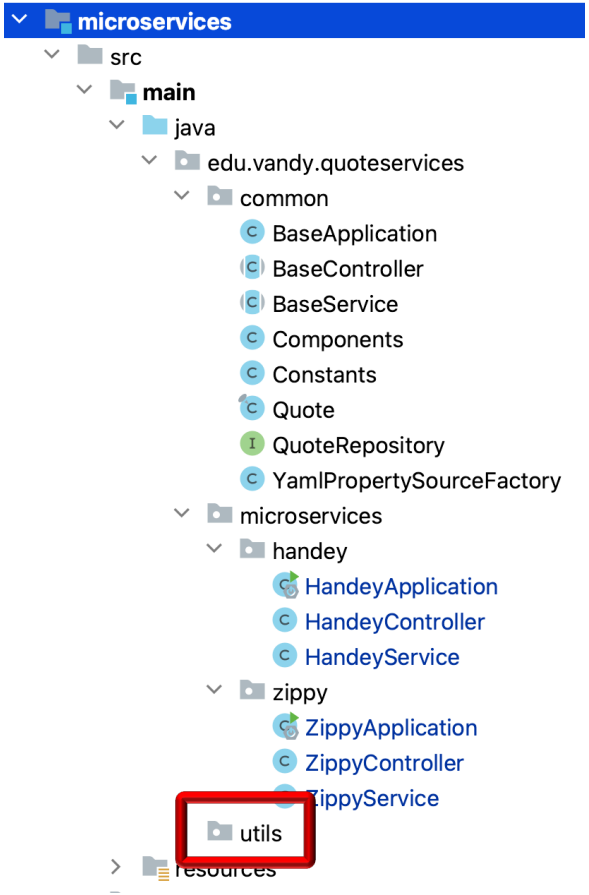
Structure of the QuoteServices App Project

- The QuoteServices App project source code is organized into several modules & packages
  - main
    - microservices
    - common
      - Consolidates various project-specific helper classes



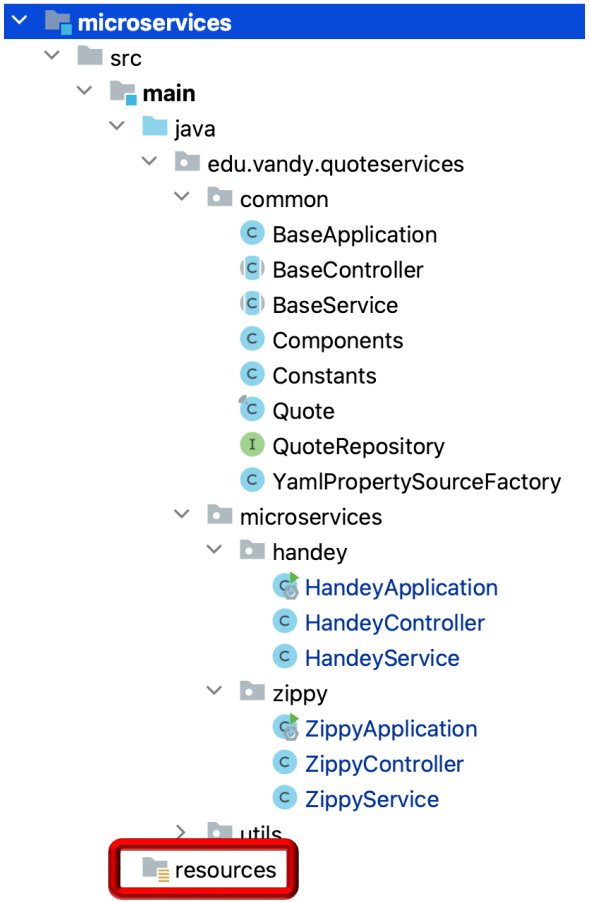
Structure of the QuoteServices App Project

- The QuoteServices App project source code is organized into several modules & packages
  - main
    - microservices
    - common
    - utils
      - Consolidates various reusable helper classes



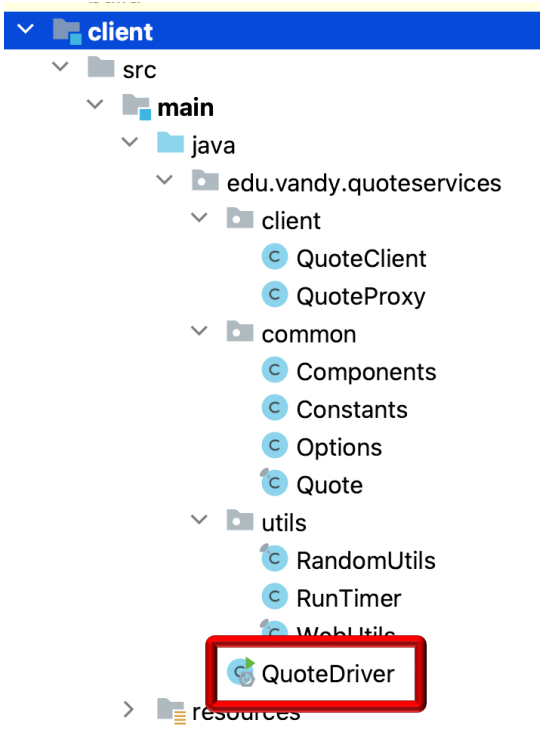
Structure of the QuoteServices App Project

- The QuoteServices App project source code is organized into several modules & packages
  - main
    - microservices
    - common
    - utils
    - resources
      - Defines various application properties
        - e.g., microservice names & port numbers, schema definitions for quotes



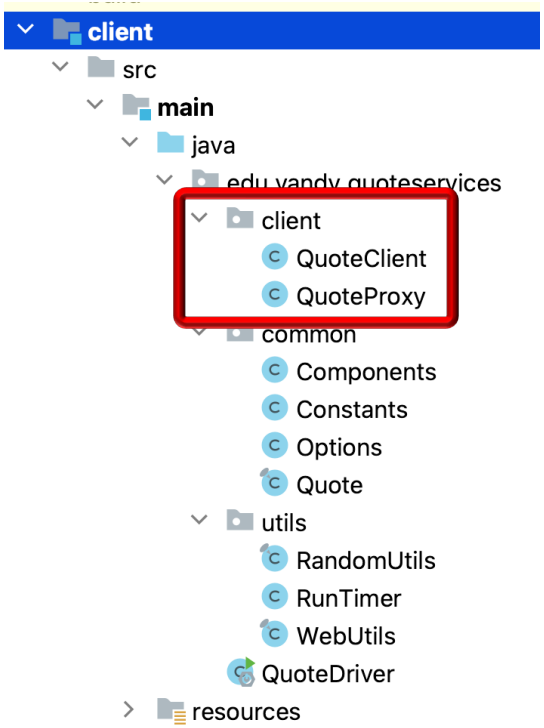
Structure of the QuoteServices App Project

- The QuoteServices App project source code is organized into several modules & packages
  - client
    - QuoteDriver
      - This test driver causes the client to send/receive requests/responses to/from the microservices running on the server & displays the results



Structure of the QuoteServices App Project

- The QuoteServices App project source code is organized into several modules & packages
  - client
    - QuoteDriver
    - client
      - Sends HTTP GET requests to the microservices



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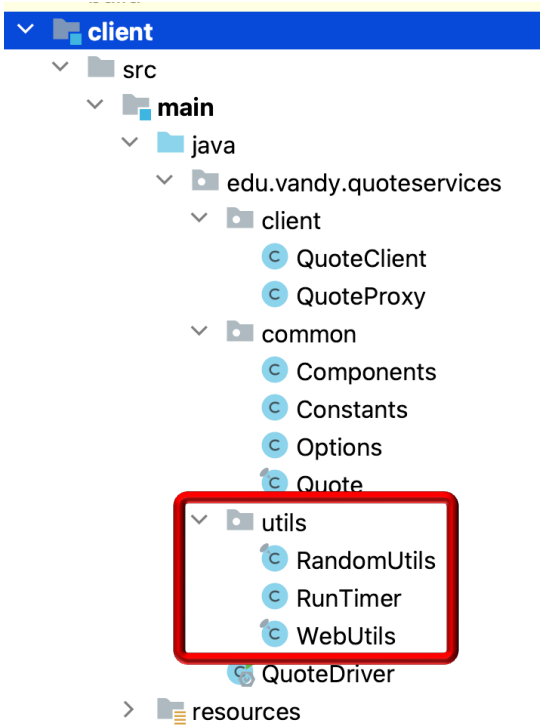

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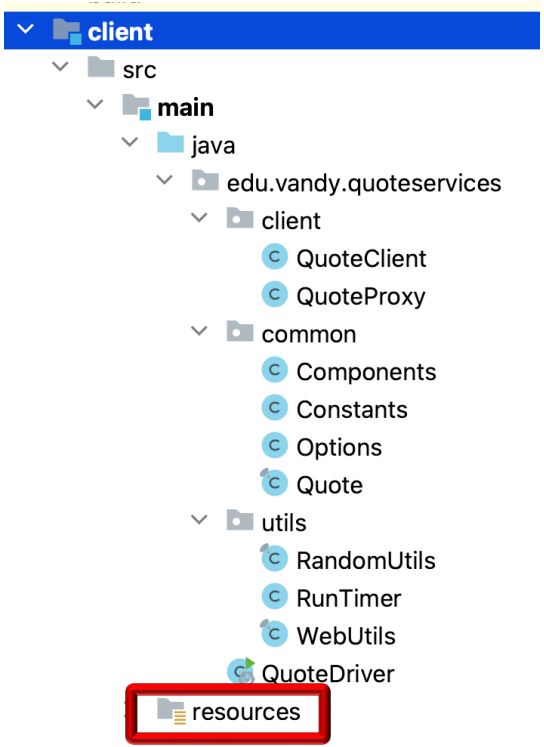
  - client
    - QuoteDriver
    - client
    - utils
    - resources
      - Defines various application properties
        - e.g., disable/enable logging & sets the client driver port number



End of the QuoteServices App Case Study: Overview