

The QuoteServices App Case Study: Implementing the Handey Microservice

Douglas C. Schmidt

d.schmidt@vanderbilt.edu

www.dre.vanderbilt.edu/~schmidt

Professor of Computer Science

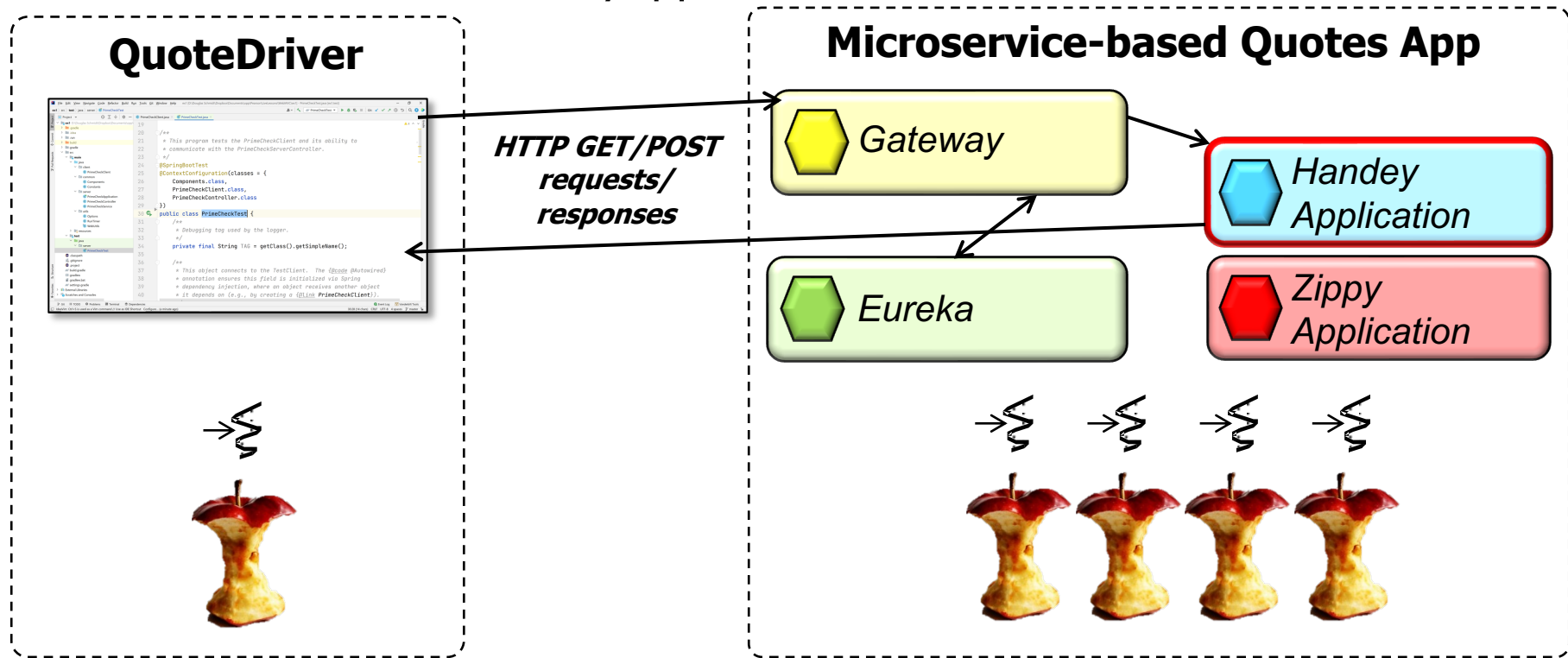
**Institute for Software
Integrated Systems**

**Vanderbilt University
Nashville, Tennessee, USA**



Learning Objectives in this Part of the Lesson

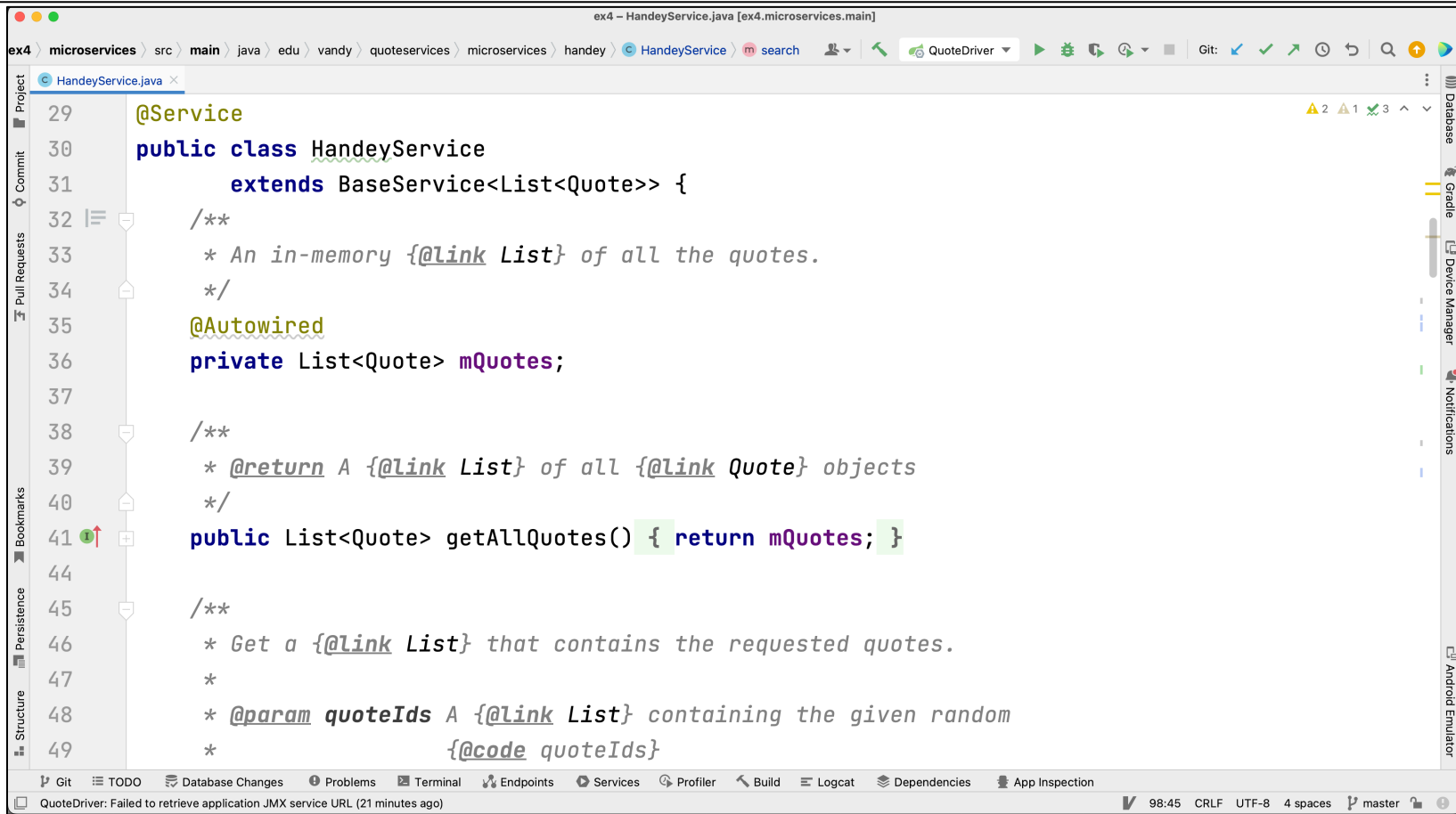
- Understand the implementation of the HandeyController & HandeyService classes that run in the HandeyApplication microservice



Both parallel & sequential Project Reactor versions

Implementing the Handey Application Microservice

Implementing the HandeyApplication Microservice



The screenshot shows an IDE window titled "ex4 - HandeyService.java [ex4.microservices.main]". The file path is "ex4 > microservices > src > main > java > edu > vandy > quoteservices > microservices > handey > HandeyService.java". The code defines a `HandeyService` class that extends `BaseService<List<Quote>>`. It includes a `@Service` annotation, a Javadoc comment describing it as an in-memory list of quotes, an `@Autowired` annotation for a `List<Quote> mQuotes` field, and a `getAllQuotes()` method that returns `mQuotes`. The IDE interface includes a sidebar with "Project", "Commit", "Pull Requests", "Bookmarks", "Persistence", and "Structure" views. The bottom status bar shows "QuoteDriver: Failed to retrieve application JMX service URL (21 minutes ago)", "98:45", "CRLF", "UTF-8", "4 spaces", and "master".

```
29  @Service
30  public class HandeyService
31      extends BaseService<List<Quote>> {
32      /**
33       * An in-memory {@link List} of all the quotes.
34       */
35      @Autowired
36      private List<Quote> mQuotes;
37
38      /**
39       * @return A {@link List} of all {@link Quote} objects
40       */
41      public List<Quote> getAllQuotes() { return mQuotes; }
42
43
44
45      /**
46       * Get a {@link List} that contains the requested quotes.
47       *
48       * @param quoteIds A {@link List} containing the given random
49       *                 {@code quoteIds}
```

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

End of the QuoteServices App Case Study: Implementing the Handey Microservice