

The LockManager App Case Study: Implementing the Server Components

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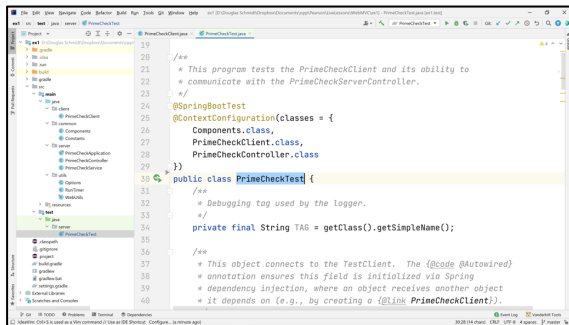
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Learning Objectives in this Part of the Lesson

- Understand the WebFlux implementation of the LockManagerController & LockManagerService classes in the reactive LockManagerApplication microservice

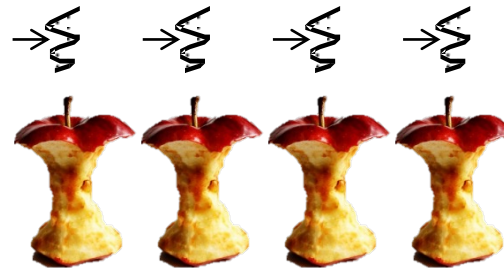
LockManagerTest



LockManagerApplication



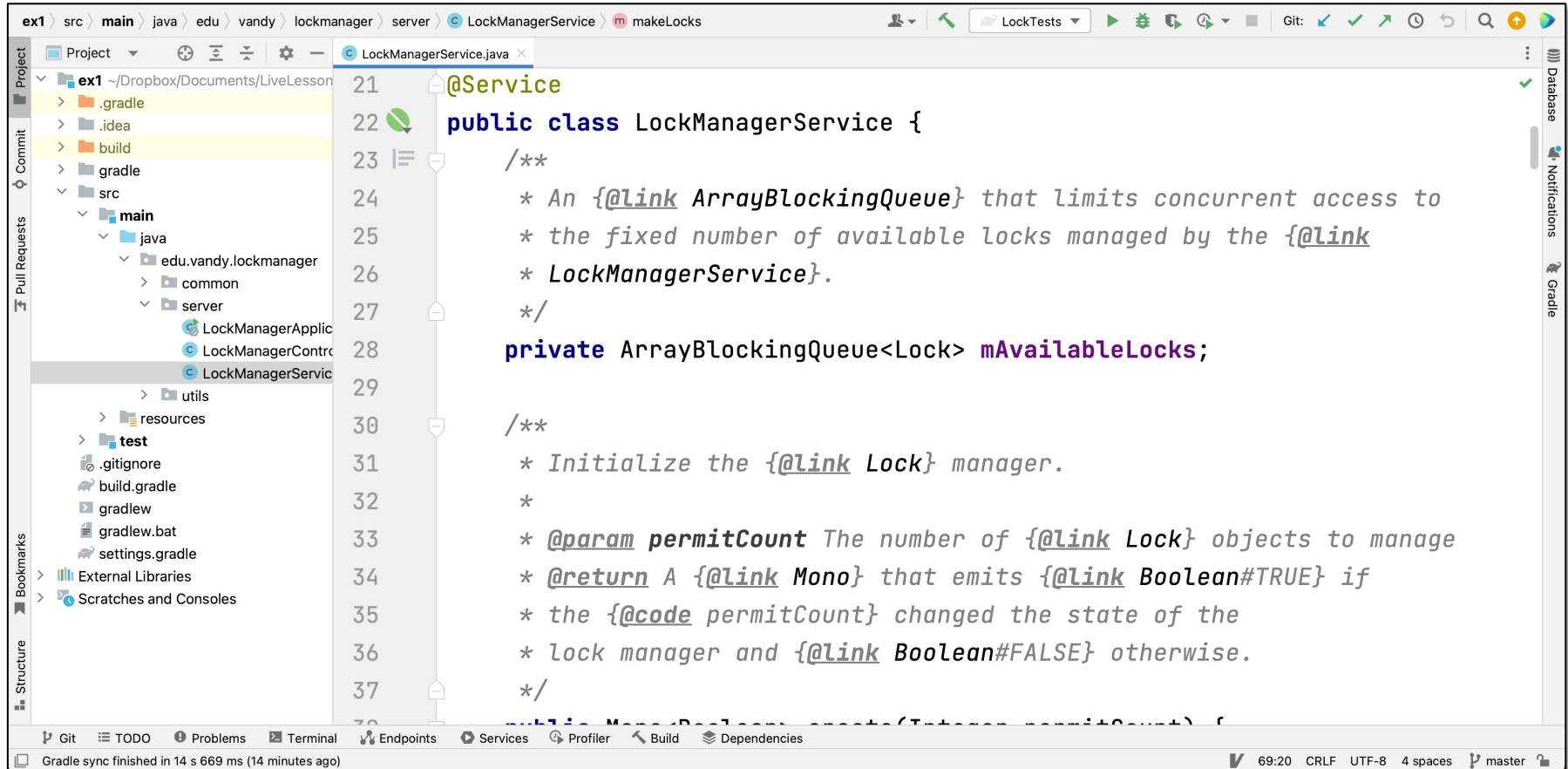
*Asynchronous
HTTP GET/POST
requests/
responses*



See github.com/douglasraigschmidt/LiveLessons/tree/master/WebFlux/ex1

Implementing the LockManager App Server

Implementing the LockManager App Server



The screenshot shows an IDE window with the file path `ex1 > src > main > java > edu > vandy > lockmanager > server > LockManagerService > makeLocks`. The left sidebar displays the project structure, including `src/main/java/edu/vandy/lockmanager/server`. The main editor shows the `LockManagerService.java` file with the following code:

```
21 @Service
22 public class LockManagerService {
23     /**
24      * An {@link ArrayBlockingQueue} that limits concurrent access to
25      * the fixed number of available locks managed by the {@link
26      * LockManagerService}.
27      */
28     private ArrayBlockingQueue<Lock> mAvailableLocks;
29
30     /**
31      * Initialize the {@link Lock} manager.
32      *
33      * @param permitCount The number of {@link Lock} objects to manage
34      * @return A {@link Mono} that emits {@link Boolean#TRUE} if
35      * the {@code permitCount} changed the state of the
36      * lock manager and {@link Boolean#FALSE} otherwise.
37      */
38     public Mono<Boolean> create(Integer permitCount) {
```

The bottom status bar indicates "Gradle sync finished in 14 s 669 ms (14 minutes ago)".

See [WebFlux/ex1/src/main/java/edu/vandy/lockmanager/server](https://github.com/Netflix/Ex1/src/main/java/edu/vandy/lockmanager/server)

End of the LockManager App Case Study: Implementing the Server Components