

Networked Systems Programming (A.Y. 2023/24)

Exercises (Lab) n. 10

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Exercise 10.1

Implement, deploy and test a simple RESTful service to handle a collection of strings. Consider implementing an operation to create a new string in the collection and an operation to get a string specified by an id. Remember to proceed as follows: (a) identify the collections; (b) model the relationships; (c) define expressive URIs; (d) define the operations for the URIs; (e) define the resource representations; (f) implement the actions and deploy; (g) test the service.

Exercise 10.2

Implement, deploy and test a RESTful service to handle a collection of users. Consider having an operation to create a user in the collection, to get a user specified by its id, to get a user specified by its *firstname* and *lastname*, to update a user specified by its id, to get all the users of the collection.

Exercise 10.3

Implement, deploy and test a RESTful service for the management of a collection of books, whose Java interface is the following.

```
Books getBookList()  
void createBook(Book book)  
Book getBookDetails(String isbn)  
void deleteBook(String isbn)  
void orderBook(String isbn)  
Order getOrder(String isbn, int oid)
```

In this exercise, we have two collections: *books* and *orders*. Differently from the previous exercises, here we have the Java interface of the operations and we need to define the URIs and the REST actions.

Upload the exercises of this lab before December 21, 2023.