

Developing RESTful Services

Primary Assessment

Evaluation Criteria

- Does the web service provide the required service methods? Do the methods operate correctly and return the correct data?
- Are Spring and MyBatis used appropriately and correctly configured? Is auto-wiring used appropriately?
- Have the web service methods been tested using a test Spring context?
- Were RESTful standards followed in developing the web service? Do the service methods handle errors properly?
- Was MyBatis used to develop the interaction with the database? Was the correct data retrieved from the database?
- Have best practices been followed at all stages? E.g., in Java, Spring, MyBatis, and SQL.

Task

You have recently joined a development team that has been given the task to create a RESTful service which will provide information about several countries around the world and some information about each country. Your web service will provide two web methods. The first method will return a collection of all the names of the countries in the database. The second web method will return all of the data for a specified country. The country will be identified by its id.

- The project will use Spring Boot.
- You will use MyBatis for all database interactions.
- The starter project includes SQL files to create the appropriate tables. You are welcome to use an in-memory database if you like (files are supplied for Oracle and HyperSQL).
- The pom for the starter project has been updated to include the libraries you will need, as far as your project team can determine. If you make changes to the pom, please comment them with an explanation.
- Verify the functionality of your web service methods by writing JUnit tests.
- Use a Spring test context in the tests and ensure that the tests will all rollback.