Spring Boot for Microservices: Communication

In this lesson, we'll look at how Spring Boot fulfills the communication requirement.

WE'LL COVER THE FOLLOWING

The suitability of Spring Boot for the implementation of microservices can be decided according to the criteria of this lesson of this chapter.

Communication

For communication, Spring Boot supports **REST**, the previous listing shows. The listing uses the **Spring MVC API**.

THE SPRING MVC API

The Spring MVC framework resides pretty well with REST and provides the necessary API support to implement it seamlessly, with little effort.

The importance of SpringMVC in RESTful web services

I. In Spring MVC, a controller handles requests for all the HTTP methods. This serves as a backbone for RESTful web services.

Example:

- `GET` methods can be used to **handle read operations**
- `POST` methods can be used to **create new** resources
- `PUT` methods can be used to **update resources**
- `DELETE` methods can be used to **remove resources** from the server

II. The representation of data is crucial in REST. This is why Spring MVC allows us to evade `View-based rendering` completely by the use of `@ResponseBody` annotation and many `HttpMessageConverter` implementations. By this, a response can be sent directly to a client.

III. Spring version 4.0's `@RestController` added in the controller class applies message conversations to all handler methods in the controller, preventing the need to annotate each method with the `@ResponseBody` annotation. This also makes our code much cleaner.

IV. Spring MVC also provides `@RequestBody` annotation, which uses `HttpMethodConverter` implementations to convert inbound HTTP data into Java objects passed into a controller's handler method.

V. The Spring framework also provides a template class, the `RestTemplate`, which can consume REST resources. You can use this class to test your RESTful web service or develop REST clients.

These were some of the important features of the Spring MVC framework which assist in developing RESTful web services.

QUIZ

1 What does MVC in the context of Spring Boot stand for?

COMPLETED 0%

1 of 2

In the *next lesson*, we'll be looking at other communication APIs that are supported by Spring.