Spring RESTful Web Services

Lesson 03

Agenda

➢ **REST Web Services design guidelines**

- URI Opacity
- Query String Extensibility
- Deliver Correct Resource Representation
- Asynchronous Services
- Receiving and Sending XML
- Exception handling and propagation

REST Web Services design guidelines

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URI Opacity

➤ URI should be design in a such a way that and users should not derive metadata from the URI

➤ The query string and fragment of URI have special meaning that can be understood by users.

➤ There must be a shared vocabulary between a service and its consumers.

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Query String Extensibility

- ➢ A service provider should ignore any query parameters it does not understand during processing.
- ➢ If it needs to consume other services, it should pass all ignored parameters along.
- ➢ This practice allows new functionality to be added without breaking existing services

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Deliver Correct Resource Representation

➢ There are four commonly used ways of delivering the correct resource representation to consumers

- – Server-driven negotiation
- – Client-driven negotiation
- – Proxy-driven negotiation
- – URI-specified representation

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Asynchronous Services

➢ An asynchronous service needs to perform the following:

- Return a receipt immediately upon receiving a request.

- Validate the request.

- If the request if valid, the service must act on the request as soon as possible. It must report an error if the service cannot process the request after a period of time defined in the service contract.

Other Guidelines

➢ **Exception handling**
  – To deal with exceptions, Spring 3 provides annotation @ExceptionHandler

➢ **XML handling**
  – follow the principle of strict out and loose in.

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Summary

➤ In this lesson we have seen:

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