Java REST Service and Spring Boot

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Core JAX RS - REST Service

- REST and the Rebirth of HTTP
- RESTful Architectural Principles
- The Object Model
- Model the URIs
- Defining the Data Format

- Assigning HTTP Methods
- Developing a JAX-RS RESTful Service
- Deploying Our Service
- Binding HTTP Methods
- @Path
- Subresource Locators

- The Basics
- @PathParam
- @MatrixParam
- @QueryParam
- @FormParam
- @HeaderParam
- @CookieParam

- Common Functionality
- Built-in Content Marshalling
- JAXB
- Custom Marshalling

- Default Response Codes
- Complex Responses
- Exception Handling
- Conneg Explained
- Language Negotiation
- Encoding Negotiation

- JAX-RS and Conneg
- Leveraging Content Negotiation
- HATEOAS and Web Services
- HATEOAS and JAX-RS
- Caching
- Concurrency

Spring REST Services

- Many Flavors of Services
- Understanding REST
- RESTful Services
- REST Resource Examples
- REST vs SOAP
- REST Services With Spring MVC
- Spring MVC @RequestMapping with REST
- Working With the Request Body and Response Body
- @RestController Annotation
- Implementing JAX-RS Services and Spring
- JAX-RS Annotations
- Java Clients Using RestTemplate
- RestTemplate Methods
- Summary

Spring Security

- Securing Web Applications with Spring Security 3.0
- Spring Security 3.0
- Authentication and Authorization
- Programmatic v Declarative Security
- Getting Spring Security from Maven
- Spring Security Configuration
- Spring Security Configuration Example
- Authentication Manager
- Using Database User Authentication
- LDAP Authentication
- Summary

Using Spring with JPA or Hibernate

- Spring JPA
- Benefits of Using Spring with ORM

- Spring @Repository
- Using JPA with Spring
- Configure Spring Boot JPA EntityManagerFactory
- Application JPA Code
- “Classic” Spring ORM Usage
- Spring JpaTemplate
- Spring JpaCallback
- JpaTemplate Convenience Features
- Spring Boot Considerations
- Spring Data JPA Repositories
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