



# WebServices

Programming & development

Course Curriculum



**WebServices Development using Java - JAX-RS**  
**60 Hours**

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## Contents-

### REST

1. **What is REST and REST Architecture and REST Constraints**
2. **JAX-RS & Jersey Hello World Example**
3. **Overview of a JAX-RS Application**
4. **Using @Consumes and @Produces to Customize Request and Response**
5. **Annotations for Field and Bean Properties of Resource Classes**

### Working with JSON

Create a RESTful Java client to perform “GET” and “POST” request to manipulate json data.

1. [RESTful Web Services with Jersey JAX-RS JSON on Tomcat](#)

### RESTful Java clients

Create a RESTful Java client to perform “GET” and “POST” request to manipulate json data.

1. [Create RESTful Java Client With Jersey Client Example](#)

### Working with XML

XML support in JAX-RS.

1. [Using JAX-RS With JAXB](#)
2. [RESTful Web Services with Jersey JAX-RS using XML on Tomcat](#)

### Course Practicals.

1. [JAX-RS @Path URI matching example](#)
2. [JAX-RS @PathParam example](#)

**Simple way to inject URI parameter that defined in @Path into Java method.**

3. [JAX-RS @QueryParam example](#)

Example to get query parameter in URI path, and also how to define an optional parameter.

4. [JAX-RS @MatrixParam example](#)

Example to get matrix parameters in URI path.

5. [JAX-RS @FormParam example](#)

Example to get HTML post form parameter values.

6. [Get HTTP headers in JAX-RS](#)

Show the use of @HeaderParam and @Context to get HTTP headers.

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7. **Download text file from JAX-RS**

Example to output a text file for user to download.

8. **Download image file from JAX-RS**

Example to output an image file for user to download.

9. **Download pdf file from JAX-RS**

Example to output pdf file for user to download.

10. **Download excel file from JAX-RS**

Example to output excel file for user to download.

