Web Component Development with Servlets and JSPs J2EE6

Course description

This course is for you if you want to do some hard core web programming in J2EE. JSP and Servlets are the web programming components of J2EE and our course provides some extensive coverage of these APIs like HTTP Request / Response objects, Single Threaded Model, Object Scopes in JSP, JSP Directives amongst many such topics.

Student Take away
- Study Material
- Learning stuff
- Sample project for practice

Web Component Development with Servlets and JSPs J2EE6 Online Training Curriculum

Introduction to Java Servlets
- Describe web applications, CGI, and the role of Java
- Describe benefits of Java servlet technology
- Create a simple Java Servlet
- Define three-tier architecture
- Define Model-View-Controller (MVC) architecture

The servlet's environment
- Understand more details of the HTTP protocol
- Understand fundamentals of HTML forms
- Understand fundamentals of the Http Servlet and related APIs
- Write code that manages client sessions and cookies

Developing JSP pages
- Understand the origins, benefits, and weaknesses of JSPs
- Describe JSP technology, the conversion of JSPs to servlets, and the lifecycle of JSPs
- Understand JSP scripting elements, declarations and directives
- Use JSP implicit variables
- Understand and use jsp: tags

More options for the Model
- Understand the roles of JDBC and JPA
- Understand the many elements that make up the model

More options for the Model continues...
- Understand fundamentals of connecting to a database using JDBC or JPA

Introduction to Java Server Pages
- Describe why Servlets are not the whole solution
- Describe essentials of JSPs
- Understand the fundamentals and reasons for MVC architecture

Container facilities for servlets and JSPs
- Understand the purpose and structure of deployment descriptors
- Control context root and servlet mapping
- Create and use context and init parameters
- Use annotations to configure servlets

Developing JSP pages using custom tags
- Relate the JSTL to common job roles in web application development and understand the use of tags in JSP development
- Recognize correct syntax for tags
- Configure a JSP to use tags from the JSTL
- Write JSP code using several standard tags
- List capabilities of JSTL tags

Asynchronous web applications
- Understand the interactions that are essential to asynchronous web pages
- Understand the role of AJAX-style client side programming
- Implement asynchronous servlets using the facilities of Java EE 6

Implementing an MVC Design
- Code a controller using a servlet
- Code a view using a JSP
- Forward control from a servlet to a JSP
- Understand fundamentals of EL
- Implement a simple MVC system

More view facilities
- Understand the four data scopes
- Understand and use EL dot and array access operators with Java Beans, arrays, and collections
- Understand and use EL implicit objects
- Create and use arithmetic expressions in EL
- Identify the need for iteration and selection in the view, and use JSTL tags to address those needs

More Controller facilities
- Understand the servlet lifecycle
- Describe and use more advanced elements of the servlet APIs
- Create filters and use them in web applications

Web application security
- Understand the role of the container in security
- Describe and implement four authentication models
- Force the use of encryption between a web application and the client browser
- Understand the role of JAAS in pluggable/extensible authentication for web application