

## Java EE Web Development

### Audience Course Java EE Web Development

The course Java EE Web Development is intended for developers who want to build Java Web applications with Java EE components like Servlets, JSP's custom tags, filter and event listeners.

### Prerequisites Java EE Web Development

To participate in this course experience with Java programming and object orientation is required.

### Realization Training Java EE Web Development

The theory is treated on the basis of presentation slides and is interspersed with exercises. Demos are used to clarify the theory. All topics asked at the Java Web Component Developer Exam are discussed. The course material is in English.

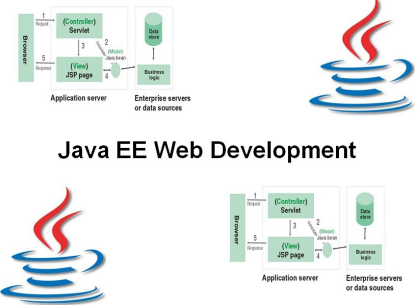
### Official Certificate Java EE Web Development

Participants receive an official certificate Java EE Web Development after successful completion of the course.

Duration: 4 days

Price: € 2450

[Open Schedule](#)



## Content Course Java EE Web Development

The course Java EE Web Development covers how servlets and JSPs are constructed and used in Java EE Web Applications.

### Servlets

First the main methods of servlets are on the agenda, like the ones used in servlet initialization, reading HTTP request data and writing HTTP response data.

### Scopes

The different scopes of Web Applications such as session scope and application scope are explained. Next the basic syntax of JSP's scriptlets, expressions and declarations are covered and the different JSP page directives are treated.

### MVC Pattern

A central element in the course is the MVC design pattern for Java Web Applications where servlets act as controller for program logic and JSP's as view for output data. In discussing this pattern, the RequestDispatcher interface is treated as well as the ways attributes can be stored and retrieved in different scopes.

### Java Beans

Ample attention is paid to techniques to separate Java code from the JSP view. In particular the use of Java beans and custom tags for this purpose is discussed.

### Filters

Also the role of deployment descriptors is part of the subject matter and security in Web applications, filters and the event framework are addressed.

## Modules Course Java EE Web Development

Module 1 : Introduction	Module 2 : Servlets	Module 3 : Scopes and Sessions
Java EE Standard Java EE Servers What is a Servlet? Possible Servlet Tasks What is a Java Server Page(JSP)? Problems with Servlets and JSP Classic MVC Pattern Model 2 Architecture Structure of a Web Application Registering a Web Application Defining Custom URL's WAR Files Handling Relative URL's	Servlet Interface Reading Initialization Parameters Concurrent Access ServletContext Interface Destroying Servlets HTTP Requests and Responses HttpServlets service, doGet and doPost Reading Form Data HTTP Request Headers Populating the Response HTTP Status Codes HTTP Response Headers	Sharing Data with Scope Objects ServletContext Application Scope Request Scope Page Scope Session Scope Session Tracking Mechanisms Sending and Reading Cookies Session Tracking with Cookies URL Rewriting Hidden Form Fields HttpSession methods Session tracking API
Module 4 : JSP's	Module 5 : JSP Directives	Module 6 : JSP Standard Actions
The Need for JSP Types of Scripting Elements Benefits of JSP Translation and Request Time Setting up your environment Expressions Predefined Variables Scriptlets Declarations jsplnit and jspDestroy	What are JSP directives JSP page Directive import Attribute contentType Attribute session Attribute buffer and autoflush Attributes extends Attribute errorPage and isErrorPage include Directive taglib Directive	jsp:include jsp:plugin, jsp:param and jsp:params What are Beans? Basic use of Beans in JSP Accessing Bean Properties Setting Bean Properties Explicitly Association with Input Parameters Sharing Beans Values of Scope Attribute Conditional Bean Operations
Module 7 : MVC Architecture	Module 8 : Expression Language	Module 9 : Custom Tags
Why combine Servlets and JSP? MVC Approach Implementing MVC Dispatching requests Storing Data in Servlet Request Storing data in Session Storing data in ServletContext Forwarding Requests Including Requests	Advantages Expression Language Activating Expression Language Invoking the EL Common EL Problem Referencing Scoped Variables Accessing Bean Properties Nested Beans Using EL Operators Conditional Evaluation	What are Tag Libraries? Custom Tag Features Simple Tag Handler Simple Tag Library Descriptor Accessing Custom Tags from JSP Attributes and Body Content JSP-based Tags Tags manipulating Body Complex Objects for Attributes
Module 10 : Security	Module 11 : Filters	Module 12: Event Listeners
Major Security Concerns Declarative Security Programmatic Security Form-based Authentication Deployment Descriptor settings BASIC Authentication Combining Security Mechanisms Pure Programmatic Security Programmatic Security with SSL	What are Filters? Filter Interface Creating Filters doFilter method Servlet Filter Related Classes Filters in a Chain Filter Mapping Accessing the Servlet Context Filter Initialization Parameters	Life-Cycle Events Framework Available Listeners Implementation Strategy Reason for listeners ServletContext Listeners ServletContextAttributeListeners HttpSession Listeners Session Creation Events SessionAttribute Listeners