

Training: Capstone Courseware
114 The Struts Framework

FORM OF TRAINING	MATERIALS	PRICE	DURATION
Traditional	Hardcopy	940 EUR	4 days
Traditional	CTAB Tablet	1040 EUR	4 days
Distance learning	Hardcopy	940 EUR	4 days
Distance learning	CTAB Tablet	940 EUR	4 days

LOCATIONS

Krakow - 5 Tatarska Street, II floor, hours: 9:00 am - 4:00 pm

Warsaw - 17 Bielska Street, hours: 9:00 am - 4:00 pm

TRAINING GOALS:

Version 1.3

This advanced course shows JSP and servlet programmers how to build web applications using the Apache Struts framework. Students learn the Struts architecture and see how it captures a great deal of pre-existing best practice: in model/view/controller action mappings, form beans and custom tags for working with HTML forms, input validation, and the Tiles view-building framework. Two chapters near the end of the course cover configuration techniques and other advanced topics.

This version of the course illustrates the use of Struts 1.3; see the previous version for coverage of Struts 1.1.

CONSPECT:

- Chapter 1. Struts Architecture
 - MVC and Model 2
 - Command Pattern
 - Jakarta Struts
 - More XML, Less Java!
 - Action Mappings
 - JavaBeans in Struts
 - Working with Forms
 - Validation

- Presentation Technology
- Tiles
- Chapter 2. Action Mappings
 - Command Pattern for Web Applications
 - ActionServlet
 - Action and Action Mappings
 - Struts Configuration
 - Selecting a Forward
 - Global Forwards
 - Declarative Exception Handling
 - Global Exception Handlers
- Chapter 3. Forms
 - Working with HTML Forms
 - Action Forms, a/k/a Form Beans
 - Relationship to Input
 - Relationship to Actions
 - Relationship to the Model
 - Relationship to Output
 - DynaActionForm and Map-Backed Forms
 - Validation
 - Coarse-Grained Form Beans
- Chapter 4. Struts Tag Libraries
 - Building View Components
 - Struts Tag Libraries
 - Attributes and Struts Expressions
 - Building Forms
 - et. al.
 - Forms and Form Beans
 - Scope and Duration of Form Data
 - Managing Hyperlinks
 - Error Messages
 - Logic Tags
- Chapter 5. The JSP Standard Tag Library
 - JSTL Overview
 - JSP Expression Language
 - Core Tags

- Formatting Tags
- SQL Tags
- XML Tags
- Mixing JSTL, EL, Scripts and Actions
- Indexed Properties and Struts HTML Forms
- Chapter 6. Internationalization and Localization
 - i18n in Java
 - i18n in Actions
 - i18n in JSTL
 - i18n in Validation
- Chapter 7. Input Validation
 - Validation in Web Applications
 - Validation in Struts
 - The Struts Validator Plug-In
 - Validating ActionForm Subtypes
 - Configuring Validation
 - Standard Validators
 - Rules
 - The ActionMessages Class
 - IsNecessary?
 - Reporting Errors
 - Multi-Page Validation
 - Client-Side Validation
 - Limitations on the Client Side
 - Implementing a Validator
 - Implementing ActionForm.validate
 - Mapping-Based Validation
- Chapter 8. Advanced Configuration
 - Struts Configuration in Depth
 - Wildcards
 - Extensions
 - The Configuration Object Model
 - Subclasses and
 - Plug-Ins
 - Integrating Other Frameworks
 - Role-Based Security

- Chaining Actions
- The ComposableRequestProcessor Class
- Configuring Command Chains
- Modules
- Chapter 9. Under the Hood
 - Global Objects
 - Specialized Struts Actions
 - The Utility Package
 - The Commons BeanUtils Class
 - Form Beans as Adapters to the Business Tier
 - Reusing Validation Rules
 - Graceful Validation
- Chapter 10. Tiles
 - Consistent Look and Feel
 - Reusable Layouts and Content
 - The Tiles Framework
 - Instantiating Layouts
 - Body-Wrap Insertions
 - Tiles and Stylesheets
 - Working with Tiles Attributes
 - The Tiles Context
 - Definitions
 - Aggregation and Inheritance
 - The Tiles Plug-In
 - Forwarding to Definitions
 - Performance Considerations

Appendix A. Learning Resources

Appendix B. Quick Reference

REQUIREMENTS:

- [Java programming](#) - Course 103 is excellent preparation.
- [Servlets programming](#) - Course 110.
- [JSP](#) - Course 112.
- Basic knowledge of [XML](#) is recommended but not essential - consider Course 501.

Difficulty level



CERTIFICATE:

The participants will obtain certificates signed by Capstone Courseware.

TRAINER:

Authorized Capstone Courseware Trainer.