

Spring Framework

Java Enterprise Applications

Školenie je určené pre Java vývojárov a architektov, ktorí majú záujem naučiť sa vyvíjať Java Enterprise aplikácie pomocou tohto populárneho frameworku.

Prostredníctvom teoretického výkladu spojeného s množstvom praktických príkladov prevedieme poslucháča od základov, až po pokročilejšie techniky vývoja trojvrstvových serverových aplikácií.

Obsah kurzu:

- **Introduction to Spring Framework:** motivation, short history, Spring modules
- **Spring Container and Dependency Injection:** application configuration (xml, annotation and Java based) and initialization, what is a component, dependency injection types, injection of collections, configuration namespaces
- **Spring Beans and Beans lifecycle:** application and bean lifecycle, lazy initialization, autowiring, container extension points, Spring proxy, bean scopes and scoped proxy, property editors, Spring and JSR330 annotations
- **Testing Spring Applications:** importance of testing, test driven development, unit versus integration tests, Spring built-in testing support
- **Aspect Oriented Programming:** what is AOP, Spring approach and limitations, Joint Points, Pointcuts, Advices, AOP proxy, named pointcuts
- **Data Access with Spring:** enterprise data access, JDBC, Hibernate, JPA, Spring added value, JdbcTemplate, exceptions handling
- **Transactions Support:** transaction managers, integration, declarative transactions, transactions and integration tests, XML based transactions
- **Web Applications and Spring MVC:** web layer integration, MVC pattern, servlet application context in web apps, JSF integration, Controllers and view resolvers
- **Web Services:** SOAP web services, JAX-WS and Spring, REST web services, JAX-RS and Spring, Spring extensions