

Java EE7

Intro to Technologies

Školenie je určené pre Java vývojárov, analytikov a architektov, ktorí majú záujem zoznámiť sa s technológiami štandardu Java EE verzie 7. Prostredníctvom teoretického výkladu spojeného s množstvom praktických príkladov prevedieme poslucháča Java EE technológiami a ich aplikáciou na trojvrstvové Java server aplikácie.

Obsah kurzu:

- **Introduction to Java EE:** architecture, components, containers, services, application packaging, programming model, specifications
- **Context and Dependency Injection:** understanding and writing CDI beans, interceptors, decorators, events
- **Bean Validation:** constrains and validation, bean validation specification, JSR303, reference implementation
- **Java Persistence API:** entities, object-relational mapping, querying entities, entity lifecycle, callbacks, listeners, embeddables, inheritance mapping, integration with bean validation, persistence unit, entity manager, manipulating entities, JPQL
- **Enterprise Java Beans:** types of EJBs, EJB Lite, container and its services, anatomy of EJB, Stateless, Stateful and Singleton beans, dependency injection, concurrency, asynchronous calls, packaging and deploying EJBs
- **Callbacks, Timer Service and Authorization:** Session beans lifecycle, Timer service, declarative and programmatic authorization
- **Transactions:** JTA, transaction support in EJBs, container and bean managed transactions, exceptions and transactions
- **JavaServer Faces:** understanding JSF, anatomy of JSF components, MVC pattern, FacesServlet, FacesContext and configuration, backing beans, exceptions and messages, navigation, conversion and validation, Ajax support

- **XML and JSON:** understanding XML, JAXP – Java API for XML processing, JAXB – Java API for XML binding, understanding JSON, JSON processing
- **Messaging:** understanding messaging, Point-to-Point, Publish-Subscribe, Message-Driven beans, JMS – Java Messaging Service, writing message Consumers and Producers, filtering messages, transactions and exceptions
- **SOAP Web Services:** SOAP specification, anatomy of SOAP web services, endpoints, WSDL and mapping, handling exceptions, writing and publishing SOAP web services, invoking SOAP web services, SOAP consumer
- **RESTfull Web Services:** HTTP protocol, methods, anatomy of RESTfull Web services, HTTP method matching, writing RESTfull Web services, handling exceptions, lifecycle and callback, invoking RESTfull Web services