

Java EE Overview

Audience Course Java EE Overview

The course Java EE Overview is intended for developers, designers, managers and architects who want to get an overview of the capabilities and operation of the Java EE, Enterprise Edition, platform.

Prerequisites Course Java EE Overview

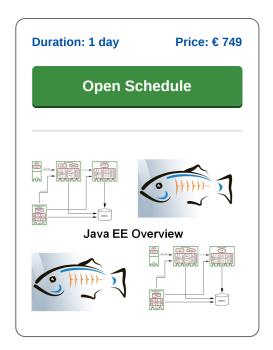
To participate in this course knowledge of modern software technologies such as C++, Java or. NET and Web applications is desirable.

Realization Training Java EE Overview

The theory is discussed by means of presentation slides. The concepts are illustrated with demos and there is opportunity to practice. The course material is in English.

Certification Java EE Overview

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



Content Course Java EE Overview

The course Java EE Overview discusses the main points of the Java EE standard as it is implemented in application servers like GlassFish, WebSphere and JBoss. The demands of enterprise applications such as scalability, failover and distribution are discussed and how these demands are met by the Java EE platform.

Java EE Components

Attention is paid to the role of the various Java EE Application Components as Java Servlets, Java Server Pages and Enterprise Java Beans. In this respect the JSF Framework for Java Web Applications is also discussed.

Java EE Services

Key Java EE services such as JNDI (Java Naming and Directory Interface) and JTA (Java Transaction API) are part of the subject matter.

Database Access

The various options for accessing databases are treated as well. Attention is paid both to the SQL-based Java Database Connectivity (JDBC) technology and to the new Persistence API for storing objects directly.

Web Services

Furthermore other Java technologies in the context of Java EE, such as Web Services based on SOAP and REST are discussed as well.

Java EE Application Servers

During the day several application servers and Enterprise Java Bean containers that rely on the Java EE standard are addressed. If time permits, JMX, Java Management Extensions, as an optional module, is treated.



Modules Course Java EE Overview

Module 1 : Java EE Intro	Module 2 : Servlets, JSP and JSF	Module 3 : Enterprise Java Beans (EJB)
Java Editions	Servlets and JSP's	Types of Enterprise Beans
Enterprise Application Challenges	Translation and Request Time	Distributed Object Foundation
Java EE Standard	Problems with Servlets and JSP	Architecture of an EJB
Java EE Servers	Classic MVC Pattern	Enterprise Bean Class
Web Components	Model 2 Architecture	EJB Object at work
EJB Components	Using Java Beans	Remote Interface
Java EE and Web Services	Scopes in Web Applications	Session Beans
Deployment Descriptors	ServletContext Scope	Statefull and Stateless
Annotations	Session Scope	Session Bean Pooling
Packaging in EAR Files	Java Web Applications	Message Driven Beans
Java EE Deployment	Web Application Structure	JNDI Naming Context
Configurable Services	MVC Frameworks	Locate resources with JNDI
Java EE API's	Java Server Faces	Context and Dependency Injection
Module 4 : Java EE Persistence	Module 5 : Java EE Web Services	Module 6 : Optional Module : JMX
Java EE Persistence	What is a Web Service?	What is JMX?
Direct File I/O	Web Service Standards	JMX Goal
Serialization	Web Service Types	Where does JMX API fit?
	Web Service Types	Where does JIMA API III?
	XML-Schema, SOAP and WSDL	Managed Beans
Java Database Connectivity		
Java Database Connectivity JDBC Drivers and URL's	XML-Schema, SOAP and WSDL	Managed Beans
Java Database Connectivity JDBC Drivers and URL's Transparant Persistence	XML-Schema, SOAP and WSDL JAX-WS Web Services	Managed Beans JMX Architecture
Java Database Connectivity JDBC Drivers and URL's Transparant Persistence Object Relational Mapping	XML-Schema, SOAP and WSDL JAX-WS Web Services Servlet Based Endpoint	Managed Beans JMX Architecture Management Consoles
Java Database Connectivity JDBC Drivers and URL's Transparant Persistence Object Relational Mapping Persistence API Entity Classes	XML-Schema, SOAP and WSDL JAX-WS Web Services Servlet Based Endpoint Stateless Session Bean Endpoint	Managed Beans JMX Architecture Management Consoles Protocol Adapters
Java Database Connectivity JDBC Drivers and URL's Transparant Persistence Object Relational Mapping Persistence API	XML-Schema, SOAP and WSDL JAX-WS Web Services Servlet Based Endpoint Stateless Session Bean Endpoint JAX-WS Annotations	Managed Beans JMX Architecture Management Consoles Protocol Adapters Standard MBeans
Java Database Connectivity JDBC Drivers and URL's Transparant Persistence Object Relational Mapping Persistence API Entity Classes	XML-Schema, SOAP and WSDL JAX-WS Web Services Servlet Based Endpoint Stateless Session Bean Endpoint JAX-WS Annotations REST Web Services	Managed Beans JMX Architecture Management Consoles Protocol Adapters Standard MBeans Implementing MBeans
Java Database Connectivity JDBC Drivers and URL's Transparant Persistence Object Relational Mapping Persistence API Entity Classes Entity Manager	XML-Schema, SOAP and WSDL JAX-WS Web Services Servlet Based Endpoint Stateless Session Bean Endpoint JAX-WS Annotations REST Web Services Standard HTTP Methods	Managed Beans JMX Architecture Management Consoles Protocol Adapters Standard MBeans Implementing MBeans Naming MBeans