

Chapter 1: Web Services Architecture
You will learn: <ul style="list-style-type: none">• Services and APIs included in the J2EE platform.• Benefits of using the J2EE platform for creating and deploying web service applications.• Functions and capabilities of the JAXP, DOM, SAX, JAXR, JAX-RPC, and SAAJ in the J2EE platform.• Characteristics of a service oriented architecture and how web services applies to this model.
Chapter 2: XML
You will learn: <ul style="list-style-type: none">• How given XML documents, schemas, and fragments determine whether their syntax and form are correct according to W3C schema.• How given XML documents, schemas, and fragments determine whether they conform to the WS-I Basic Profile 1.0a.• How to use the XML schema in J2EE web services.• Namespaces in an XML document.
Chapter 3: WSDL and UDDI
You will learn: <ul style="list-style-type: none">• How to utilize WSDL in web services.• How W3C XML Schema is used as a typing mechanism in WSDL 1.1.• UDDI data structures and the requirements imposed on UDDI by the WS-I Basic Profile 1.0a.• Functions provided by the UDDI Publish and Inquiry APIs for interacting with a UDDI business registry.
Chapter 4: SOAP, JAXP, and JAXB
You will learn: <ul style="list-style-type: none">• Functions and capabilities of the APIs included within JAXP.• Mechanisms for parsing and processing the information in an XML document.• Functions and capabilities of JAXB.• SAAJ APIs for creating and manipulating a SOAP message.
Chapter 5: JavaServer Pages and Java Servlets
You will learn: <ul style="list-style-type: none">• Architecture of JavaServer Page and servlet technology and the syntax of a JavaServer Page.• How to deploy and configure a WebLogic Application Server.• How to build a JSP based web application with a web service.

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Chapter 6: J2EE and Web Services

You will learn:

- Steps for configuring, packaging, and deploying J2EE Web services and service clients.
- Packaging formats: .ear, .war, .and jar.
- Deployment descriptor settings and the associated web services description file.
- RPC mapping files.
- Service reference elements used for EJB and servlet endpoints.

Chapter 7: JAXM

You will learn:

- How to develop code for processing XML files using the SAX, DOM, XSLT, and JAXB APIs.
- How to create a WSDL file that describes the service and generates a service implementation.
- How to develop code for creating an XML-based, document style, web service using the JAX-RPC APIs.
- SOAP logging mechanism for testing and debugging a web service application using J2EE web service APIs.
- How to develop code for handling system and service exceptions and faults received by a web services client.

Chapter 8: JAX-RPC

You will learn:

- JAXR in web service architectural model.
- Business registry functionality supported by JAX.
- JAXR business objects and how they map to the UDDI data structures.
- JAXR for connecting to a UDDI business registry.
- How to execute queries for locating services that meet specific requirements.
- Publishing or updating information about a business service.

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Chapter 9: JAXR

You will learn:

- Service description model, client connection types, interaction modes, transport mechanisms/protocols, and endpoint types in relation to JAX-RPC.
- Design and develop web service applications that use servlet-based endpoints and EJB based endpoints.
- Design and develop a web service client, such as a J2EE client and a stand-alone Java client, using the appropriate JAX-RPC client connection style.
- Develop and configure a web service client that accesses a stateful web service.
- WSDL to Java versus Java to WSDL development approach.
- Web service applications that use either synchronous/request response, one-way RPC, or non-blocking RPC invocation modes.
- JAX-RPC Handler API for creating a SOAP message handler.
- The function of a handler chain and the role of SAAJ when creating a message handler.

Chapter 10: WebLogic Web Service Features

You will learn:

- How to create WebLogic web services.
- WebLogic web services architecture.
- Writing the java code for the EJB.
- How to create EJB deployment descriptors.
- How to create the build.xml Ant build file.
- How to implement a stateful WebLogic web service.
- How to create the web service EAR file package.
- The web-services.xml file.

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