

Reading and Writing XML with JAXB



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Overview



Understanding the JAXB API

Marshalling Java Objects to XML

Unmarshalling XML to Java Objects



Understanding the JAXB API



Understanding the JAXB API

- Package **javax.xml.bind**
- API documentation
 - <http://docs.oracle.com/javase/8/docs/api/>
- Entry point: class **JAXBContext**
 - Factory method: **newInstance**
 - Marshaller, Unmarshaller



Marshalling and Unmarshalling

- Java to XML = **Marshalling**
 - Using a `javax.xml.bind.Marshaller`
- XML to Java = **Unmarshalling**
 - Using a `javax.xml.bind.Unmarshaller`
- Binder, JAXBIntrospector



Alternative JAXB Implementations

- **Factory methods facilitate alternative implementations**
 - Example: EclipseLink MOXy
- **Why use an alternative implementation?**
 - Extra features
 - Better performance

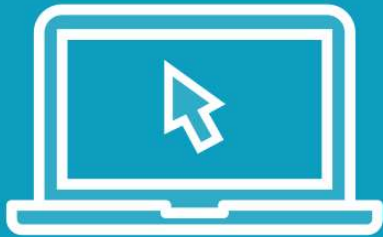


JAXB API Best Practices

- Reuse the **JAXBContext** object
 - Thread-safe
 - Creation is expensive
- Do not reuse **Marshaller**, **Unmarshaller**
 - Stateful, not thread-safe
 - Creation is cheap



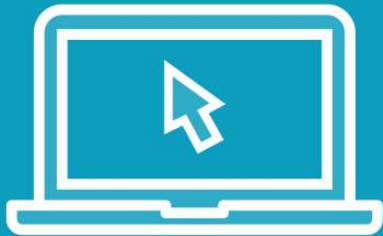
Demo



Marshalling Java Objects to XML



Demo



Unmarshalling XML to Java Objects



Summary



Using the JAXB API

Class JAXBContext

- Factory methods

Marshalling

Unmarshalling

