Oracle Fusion Middleware 11g: Build Applications with ADF I

This Fusion Middleware 11g training is ideal for developers who want to build Java EE applications using Oracle ADF. Use Oracle JDeveloper 11g Release 1 Patch Set 1 to build, test and deploy web applications.

Learn To

This course is aimed at developers who want to build Java EE applications using Oracle ADF. Learn to use Oracle JDeveloper 11g Release 1 Patch Set 1 to build, test and deploy an end-to-end web application.

Learn To:

- Build end-to-end web applications.
- Develop Java EE components with Oracle ADF.
- Build rich user interfaces with ADF Faces.
- Use the new capabilities of Oracle JDeveloper 11g Release 1 Patch Set 1.

Benefits to You:

Simplify application development in your organization to increase productivity. Become more efficient at building Java EE applications using Oracle ADF (innovative yet mature Java EE development framework) and deploy an end-to-end web application.

Build & Deploy

The data model is built with ADF Business Components and the user interface with ADF Faces. During this course, you'll learn to build each part of the application with the Fusion technology stack and then deploy it to WebLogic Server.

Java EE

Java EE is a standard, robust, scalable and secure platform that forms the basis for many of today’s enterprise applications. Oracle Application Development Framework (Oracle ADF) is an innovative, yet mature Java EE development framework that is directly supported and enabled by Oracle JDeveloper 11g.

Oracle ADF

Oracle ADF simplifies Java EE development by minimizing the need to write code that implements the application’s infrastructure. allowing developers to focus on the features of the actual application.

Prerequisites

Audience

- Developer

Course Objectives

- Expose the data model in a web application with a rich ADF Faces user interface

- Create JSF pages
- Use rich client components in JSF pages
- Add validation to ADF applications
- Secure Web applications
- Build and customize a data model by using ADF Business Components

Course Topics

Introduction to Fusion and ADF

- Describing Fusion architecture
- Explaining how ADF fits into the Fusion architecture
- Describing the ADF technology stack (MVC)

Getting Started with JDeveloper

- Listing JDeveloper benefits for application development
- Using the features of the JDeveloper IDE
- Defining IDE preferences
- Creating applications, projects, and connections in JDeveloper

Building a Data Model with ADF Business Components

- Introducing ADF Business Components
- Creating Business Components from tables
- Testing the data model

Querying and Persisting Data

- Using view objects
- Using entity objects to persist data
- Synchronizing entity objects with database table changes
- Creating associations
- Creating updateable view objects
- Creating master-detail relationships
- Refactoring

Exposing Data

- Creating application modules
- Using master-detail view objects in application modules
- Managing Business Components transactions
- Abstracting business services with ADF Model

Declaratively Customizing Data Services

- Internationalizing the data model
- Editing business components
- Modifying default behavior of entity objects
- Changing the locking behavior of an application module

Programmatically Customizing Data Services

- Generating Java classes
- Programmatically modifying the behavior of entity objects
- Programmatically modifying the behavior of view objects
- Adding service methods to an application module
- Using client APIs

Validating User Input

- Understanding validation options: Database, Data Model, or UI
- Triggering validation execution
- Handling validation errors
- Using Groovy expressions in validation
- Using programmatic validation

Troubleshooting ADF BC Applications

- Troubleshooting the business service
- Troubleshooting the UI
- Using logging and diagnostics
- Using the JDeveloper debugger

Understanding UI Technologies

- Describing the use of Web browsers and HTML
- Describing the function of Servlets and JSPs
- Defining JavaServer Faces
- Explaining the JSF component architecture and JSF component types
- Explaining the purpose of backing beans and managed beans
- Describing the JSF life cycle
- Explaining how ADF Faces augments the JSF life cycle