

# Oracle Fusion Middleware 11g: Build Applications with Oracle Forms Ed 1

**Duration:** 5 Days

What you will learn

This course is also suitable for customers using Forms 12c. This Oracle Fusion Middleware 11g: Build Applications with Oracle Forms training explores building Oracle Forms Builder 11g. Expert instructors will teach you how to create high-performance applications for the Web that are also scalable. Learn To: Use Oracle Forms Builder 11g. Enhance applications with various GUI controls. Add functionality to applications by writing triggers. Use the Forms Debugger to troubleshoot applications. Validate user input and display meaningful error messages. Use WebUtil to interact with client computers. Validate user input, control navigation and display meaningful messages to users. Use WebUtil to interact with the client machine and pass values from one form to another. Replace or supplement default transaction processing. Benefits to YouWhen you walk away from this course, you will know how to build a sample Forms application for an order entry system using a variety of GUI controls. You'll have the knowledge and skills to enhance the appearance and functionality of the basic form by using PL/SQL trigger, JavaBeans, and Pluggable Java Components. Please Note: Emphasis is placed on designing objects and code for reuse.

**Related Training** 

Required Prerequisites

Experience with SQL and PL/SQL basics

Suggested Prerequisites
Experience in advanced SQL & PL/SQL

Oracle Database 11g: Advanced PL/SQL

Course Objectives

Link one form module to another

Create form modules

including components for database interaction and GUI controls

Display form modules in multiple windows and use a variety of layout styles

Test form modules in a Web browser

Debug form modules in a 3-tier environment

Implement triggers to enhance form functionality

Reuse objects and code

### **Course Topics**

# **Running a Forms Application**

Running a Form
Identifying the Data Elements
Navigating a Forms Application
Using the Modes of Operation
Querying Data
Inserting, Updating, and Deleting Records
Saving Changes
Displaying Errors

## Working in the Forms Builder Environment

Forms Builder Key Features
Forms Builder Components
Navigating the Forms Builder Interface
Forms Builder Module Object Hierarchy
Customizing Your Forms Builder Session
Forms Executables and Module Types
Defining Environment Variables
Testing a Form with the Run Form Button

# **Creating a Basic Form Module**

Creating a New Form Module
Creating a New Data Bock
Using Template Forms
Saving and Compiling a Form Module
Module Types and Storage Formats
Deploying a Form Module
Producing Documentation

#### **Creating a Master-Detail Form**

Creating Data Blocks with Relationships Running a Master-Detail Form Module Modifying the Structure of a Data Block Modifying the Layout of a Data Block

# **Working Data Blocks and Frames**

Managing Object Properties

Creating Visual Attributes

Controlling the Behavior and Appearance of Data Blocks

**Controlling Frame Properties** 

Displaying Multiple Property Palettes

Setting Properties on Multiple Objects

Copying Properties

Creating Control Blocks

#### **Working with Text Items**

Creating a Text Item

Modifying the Appearance of a Text Item

Controlling the Data of a Text Item

Altering the Navigational Behavior of a Text Item

Enhancing the Relationship between Text Item and Database

Adding Functionality to a Text Item

Displaying Helpful Messages

## **Creating LOVs and Editors**

LOVs and Record Groups

Creating an LOV Manually

Using the LOV Wizard to Create an LOV

**Setting LOV Properties** 

LOV Column Mapping

Defining an Editor

**Setting Editor Properties** 

Associating an Editor with a Text Item

### **Creating Additional Input Items**

Input Items Overview

Creating a Check Box

Creating a List Item

Creating a Radio Group

### **Creating Noninput Items**

Noninput Items Overview

Creating a Display Item

Creating an Image Item

Creating a Push Button

Creating a Calculated Item

Creating a Hierarchical Tree Item

Creating a Bean Area Item

# **Creating Windows and Content Canvases**

Displaying a Form Module in Multiple Windows

Creating a New Window

Displaying a Form Module on Multiple Layouts

Creating a New Content Canvas

#### **Working with Other Canvas Types**

Overview of Canvas Types

Creating a Stacked Canvas Creating a Toolbar Creating a Tab Canvas

# **Producing and Debugging Triggers**

Trigger Overview
Creating Triggers in Forms Builde
Specifying Execution Hierarchy
PL/SQL Editor Features
Using the Database Trigger Editor
Using Variables in Triggers
Adding Functionality with Built-in Subprograms
Using the Forms Debugger

# **Adding Functionality to Items**

Coding Item Interaction Triggers Interacting with Noninput Items

### **Displaying Run-Time Messages and Alerts**

Built-Ins and Handling Errors
Controlling System Messages
The FORM\_TRIGGER\_FAILURE Exception
Triggers for Intercepting System Messages
Creating and Controlling Alerts
Handling Server Errors

#### **Using Query Triggers**

Query Processing Overview
SELECT Statements Issued During Query Processing
Setting WHERE and ORDER BY clauses and ONETIME\_WHERE property
Writing Query Triggers
Query Array Processing
Coding Triggers for Enter-Query Mode
Overriding Default Query Processing
Obtaining Query Information at Run Time

# **Validating User Input**

Validation Process
Controlling Validation by Using Properties
Controlling Validation by Using Triggers
Performing Client-Side Validation with PJCs
Tracking Validation Status
Using Built-ins to Control When Validation Occurs

### **Controlling Navigation**

Using Object Properties to Control Navigation Writing Navigation Triggers Avoiding the Navigation Trap Using Navigation Built-Ins in Triggers

#### **Overriding or Supplementing Transaction Processing**

**Transaction Processing Overview** 

Using Commit Triggers
Testing the Results of Trigger DML
DML Statements Issued during Commit Processing
Overriding Default Transaction Processing
Getting and Setting the Commit Status
Implementing Array DML

## **Writing Flexible Code**

What is Flexible Code?
Using System Variables for Flexible Coding
Using Built-in Subprograms for Flexible Coding
Copying and Subclassing Objects and Code
Referencing Objects by Internal ID
Referencing Items Indirectly

### **Sharing Objects and Code**

Benefits of Reusable Objects and Code
Working with Property Classes
Working with Object Groups
Copying and Subclassing Objects and Code
Working with Object Libraries
Working with SmartClasses
Reusing PL/SQL
Working with PL/SQL Libraries

### Using WebUtil to Interact with the Client

Benefits of WebUtil Integrating WebUtil into a Form Interacting with the Client

### **Introducing Multiple Form Applications**

Multiple Form Applications Overview Starting Another Form Module Defining Multiple Form Functionality Sharing Data among Modules