

## Oracle Forms Developer 10g: Build Internet Applications

**Duration:** 5 Days

### What you will learn

Leverage your investment by taking advantage of web technologies to easily and quickly construct sophisticated database forms and business logic with minimal effort. This course focuses on teaching students to use Oracle Forms Developer 10g (10.1.2.0.2) to rapidly build scalable, high-performance applications for the Internet.

In this course students build, test, debug, and deploy interactive Internet applications. Working in a graphical user interface (GUI) environment, they develop an order entry application from the ground up. This application incorporates several advanced features that provide a rich user experience while implementing business rules.

This course counts towards the Hands-on course requirement for the Oracle Forms Developer Certified Professional Certification. Only instructor-led inclass or instructor-led online formats of this course will meet the Certification Hands-on Requirement. Self Study CD-Rom and Knowledge Center courses are excellent study and reference tools but DO NOT meet the Hands-on Requirement for certification.

Learn To:

Customize forms with user input items such as check boxes, list items, radio groups, and Pluggable Java Components

Integrate Java into Forms applications by using JavaBeans

Control navigation, data access, validation, and transactions by creating event-related triggers

Enable Forms applications running on the Web to access files and applications on the client computer

Display Forms elements and data in multiple canvases and windows

Deploy Forms applications to the Web

### Audience

Application Developers

Developer

Forms Developer

PL/SQL Developer

Support Engineer

Technical Consultant

### Prerequisites

*Required Prerequisites*

Oracle Database 10g: Advanced PL/SQL

*Suggested Prerequisites*

A good familiarity with Graphical User Interface (GUI)

Working experience with the Web browser

### Course Objectives

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  
Reuse objects and code  
Link one form module to another

## **Course Topics**

### **Introducing Oracle Forms Developer and Forms Services**

Grid Computing  
Oracle 10g Products  
Oracle Application Server 10g Architecture  
Benefits and Components of Oracle Developer Suite 10g  
Running a Forms Developer Application  
Working in the Forms Developer Environment

### **Creating Forms Modules**

Creating a Basic Forms Module  
Creating a Master-Detail Forms Module  
Modifying the Data Block  
Modifying the Layout

### **Working with Data Blocks and Frames**

Using the Property Palette  
Managing Object Properties  
Creating and Using Visual Attributes  
Controlling the Behavior and Appearance of Data Blocks  
Controlling Frame Properties  
Creating Control Blocks  
Deleting Data Blocks

### **Working with Input Items**

Creating Text Items  
Controlling the Behavior and Appearance of Text Items  
Creating LOVs  
Defining Editors  
Creating Check Boxes  
Creating List Items  
Creating Radio Groups

### **Working with Non Input Items**

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

### **Working with Windows and Canvases**

Overview of Windows and Canvases  
Displaying a Forms Module in Multiple Windows  
Creating a New Window

Displaying a Forms Module on Multiple Layouts

Creating a New Content Canvas

Creating a New Stacked Canvas

Creating a New Toolbar Canvas

Creating a New Tab Canvas

### **Producing Triggers**

Grouping Triggers into Categories

Defining Trigger Components: Type, Code, and Scope

Specifying Execution Hierarchy

Using the PL/SQL Editor

Writing Trigger Code

Using Variables and Built-ins

Using the When-Button-Pressed and When-Window-Closed Triggers

### **Debugging Triggers**

The Debugging Process

The Debug Console

Setting Breakpoints

Debugging Tips

Running a Form in Debug Mode

Stepping through Code

### **Adding Functionality to Items**

Coding Item Interaction Triggers

Defining Functionality for Check Boxes

Changing List Items at Run Time

Displaying LOVs from Buttons

Populating Image Items

Populating and Displaying Hierarchical Trees

Interacting with JavaBeans

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

Built-ins and Handling Errors

Controlling System Messages

The FORM\_TRIGGER\_FAILURE Exception

Using Triggers to Intercept System Messages

Creating and Controlling Alerts

Handling Server Errors

### **Query Triggers**

SELECT Statements Issued During Query Processing

WHERE and ORDER BY Clauses and the 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

### **Validation**

Validation Process

Controlling Validation Using Properties

- Controlling Validation Using Triggers
- Performing Client-Side Validation with PJsCs
- Tracking Validation Status
- Using Built-ins to Control When Validation Occurs

## **Navigation**

- Navigation Overview
- Understanding Internal Navigation
- Using Object Properties to Control Navigation
- Writing Navigation Triggers: When-New--Instance, Pre- and Post- Triggers
- The Navigation Trap
- Using Navigation Built-ins in Triggers

## **Transaction Processing**

- The Commit Sequence of Events
- Characteristics and Common Uses of Commit Triggers
- Testing the Results of Trigger DML
- DML Statements Issued During Commit Processing
- Overriding Default Transaction Processing
- Running Against Data Sources Other Than Oracle
- 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
- Referencing Objects by Internal ID
- Referencing Items Indirectly

## **Sharing 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 Forms Module
- Defining Multiple Form Functionality
- Sharing Data Among Modules