



## Oracle Forms Developer 10g : Build Internet Applications Course 36 Contact Hours

### What you will learn

In this course, you will build, test and deploy Internet applications with Oracle Forms. Working in a graphical user interface (GUI) environment, you learn how to build forms with user input items such as check boxes, list items, and radio groups. You will also display Form elements in multiple windows and customize data access by creating event-related triggers. This is one of the three exams required to achieve the OCP Developer Certification.

### Audience

Forms Developer, Support Engineer

### Prerequisites

Oracle Database 10g: Program with PL/SQL

### 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 Outline

Introducing Oracle Forms Developer and Forms Services  
Grid Computing  
Oracle 10g Products  
Oracle Application Server Architecture  
Oracle Forms Services Architecture  
Benefits and Components of Oracle Developer Suite  
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

Creating Windows and Canvases

Overview of Windows and Canvases

Displaying a Form Module in Multiple Windows

Creating a New Window

Displaying a Form Module on Multiple Layouts

Creating a New Content Canvas

Creating a Stacked Canvas

Creating a Toolbar

Creating a Tab Canvas

Producing Triggers

Grouping Triggers into Categories

Defining Trigger Components: Type, Code, and Scope

Specifying Execution Hierarchy

Using the PL/SQL Editor

Using the Database Trigger 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  
Handling Server Errors  
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 PJC's  
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  
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

