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 PJCs
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