

Course Description: 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.

Who Should Attend: Forms Developers and Support Engineers will benefit from taking this course.

Prerequisites: Students should have taken Oracle Database 10g: Program with PL/SQL or have equivalent experience.

Benefits of Attendance: Upon completion of this course, students will be able to:

- 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
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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