



## Oracle Fusion Middleware 11g: Build Applications with Oracle Forms (Exam 1z0-151)

## What you will learn

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.
- Build a Sample Forms Application
- You'll also learn to build a sample Forms application for an order entry system using a variety of GUI controls. Expert
- Oracle University instructors will show you how to enhance the appearance and functionality of the basic form by using
- PL/SQL trigger, JavaBeans, and Pluggable Java Components.
- Note:
- Emphasis is placed on designing objects and code for reuse.

#### **Audience**

- Application Developers
- Developer
- Forms Developer
- PL/SQL Developer
- Support Engineer
- Technical Consultant

#### **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**

- 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
- Link one form module to another

## **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

