

## Oracle Fusion Middleware 11g: Build Applications with Oracle Forms

**Duration:** 5 Days

### 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

### Related Training

#### *Required Prerequisites*

Experience with SQL and PL/SQL basics

### *Suggested Prerequisites*

Experience in advanced SQL & PL/SQL

Oracle Database 11g : Langage PL/SQL avancé NOUVEAU

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 Builder

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 PJC's

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