Introduction to Application Express v3.2

Course Summary

Description

Application Express is Oracle's lightweight database-centric web development tool that can be used to easily create small, simple web applications. It provides great functionality for managing the database structures and actual data within an Oracle database.

Objectives

At the end of this course, students will be able to:

- Discuss the Oracle APEX architecture
- Manage database objects using SQL Workshop
- Load/unload data, run reports using Utilities
- Build a database-centric Web application using Application Builder
- Administer an APPLICATION EXPRESS Workspace

Topics

- Introduction to Oracle APPLICATION EXPRESS version 3.2
- APPLICATION EXPRESS Functionality
- Using SQL Workshop
- Using Utilities
- Application Builder Basics
- Forms and Reports
- Working with Pages, Regions and Templates
- Modifying the Application User Interface
- Page Processing
- PDF Printing in APEX
- Apex and Web Services
- Shared Components and Development Practices
- Session State
- Security Implementation and Deployment
- APEX Workspace Administration

Audience

It is ideally suited for the developer coming from the Oracle Forms/Reports world that wants to learn to develop a web application from scratch. It is equally useful for data managers that would like to move their data (and applications) from a single user environment such as a spreadsheet or Microsoft Access application to database repository.

Prerequisites

Duration

Four days

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Course Outline

I. **Introduction to Oracle APPLICATION EXPRESS version 3.2**
   A. What is Oracle Application Express (APEX)?
   B. Benefits
   C. Software requirements
   D. Architecture and installation
   E. Capabilities
   F. Typical APEX applications
   G. Major components
   H. Oracle Resources

II. **APPLICATION EXPRESS Functionality**
   A. Workspace Concepts
   B. Workspace Login
   C. APPEX Components
   D. Application Builder Overview
   E. SQL Workshop Overview
   F. Utilities Overview
   G. Demonstration Applications

III. **Using SQL Workshop**
   A. Accessing SQL Workshop
   B. Using Object Browser
   C. Executing SQL commands
   D. Working with SQL Scripts
   E. Using Query Builder

IV. **Using Utilities**
   A. Accessing Utilities
   B. Using Data Load and Unload
   C. Generating DDL
   D. Running Object Reports
   E. Using the Recycle Bin
   F. Running APEX Views Reports
   G. Using Schema Comparison
   H. Understand data available from Database Monitor and About Database

V. **Application Builder Basics**
   A. Understand the Basics of Application Builder
   B. Application Builder Terms
   C. Methods of Creating an Application
   D. Creating an Application from Scratch demo
   E. Forms and Reports
   F. Creating a Form Using a Wizard
   G. Creating Reports Using Wizards
   H. Editing Report Attributes
   I. Interactive Reports
   J. Creating a Parameterized Report
   K. Creating a Drill down Report

VI. **Working with Pages, Regions and Templates**
   A. Page Overview
   B. Editing Page Attributes
   C. Developer Toolbar
   D. Creating a Region
   E. Region Types
   F. Editing Region Attributes
   G. Overview of Templates
   H. Editing a Page Template

VII. **Modifying the Application User Interface**
   A. Adding Items and Buttons
   B. Calendars and Charts
   C. Working with Check Boxes

VIII. **Page Processing**
   A. Explain the difference between page rendering and page processing
   B. Create computations
   C. Validate user input
   D. Process data
   E. Create branching within an application

IX. **PDF Printing in APEX**
   A. Understand software requirements for PDF printing
   B. Install BI Publisher to enable PDF printing
   C. Configure APEX to work with BI Publisher
   D. Create PDF reports
   E. Use BI Publisher Desktop to configure a report

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Course Outline (cont'd)

X. Apex and Web Services
- A. Understand what a Web Service is
- B. Get a basic understanding of SOAP, WSDL, and UDDI
- C. Create a web service reference from WSDL

XI. Shared Components and Development Practices
- A. Parent and Standard Tabs
- B. Navigation Bars
- C. Lists
- D. Breadcrumb Menus
- E. List of Values
- F. Themes
- G. Application Design Best Practices
- H. Packaging Applications
- I. Lifecycle

XII. Session State
- A. What is a Session State?
- B. APEX Session State Implementation
- C. Viewing Session State
- D. Getting Session State Values
- E. Setting a Session State Value
- F. Clearing Session State and Cache Values
- G. Declaratively encrypting Session State
- H. Specifying session timeouts for maximum session time and maximum idle time
- I. Creating password item types

XIII. Security Implementation and Deployment
- A. Overview of Security
- B. Authentication
- C. Creating a Authentication Scheme
- D. Authorization
- E. Creating an Authentication Scheme
- F. Deploying an Application

XIV. APEX Workspace Administration
- A. Locking and Unlocking Pages
- B. User Roles
- C. Requesting a New Workspace
- D. Managing APEX Users
- E. Monitoring Workspace Utilization
- F. Managing Log Reports
- G. Administering Session State
- H. Provisioning Services

XV. Apex Forms Conversion
- A. Convert Forms, Reports, and PL/SQL Libraries
- B. Create an Apex Workspace
- C. Create an Conversion Project
- D. Analyze the Forms Application in Apex
- E. Generate Apex Application
- F. Customize Apex Application

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