

PeopleSoft PeopleTools II Ed 1

Student Guide

D105603GC10

1.0

November 2019

ORACLE®

Copyright © 2019, Oracle and/or its affiliates. All rights reserved.

This document contains proprietary information and is protected by copyright and other intellectual property laws. You may copy and print this document solely for your own use in an Oracle training course. The document may not be modified or altered in any way. Except where your use constitutes "fair use" under copyright law, you may not use, share, download, upload, copy, print, display, perform, reproduce, publish, license, post, transmit, or distribute this document in whole or in part without the express authorization of Oracle.

The information contained in this document is subject to change without notice. If you find any problems in the document, please report them in writing to: Oracle University, 500 Oracle Parkway, Redwood Shores, California 94065 USA. This document is not warranted to be error-free.

If this documentation is delivered to the United States Government or anyone using the documentation on behalf of the United States Government, the following notice is applicable:

U.S. GOVERNMENT RIGHTS

The U.S. Government's rights to use, modify, reproduce, release, perform, display, or disclose these training materials are restricted by the terms of the applicable Oracle license agreement and/or the applicable U.S. Government contract.

Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

Contents

Lesson 1

Course Overview	9
Agenda	11

Lesson 2

Technology Overview	17
Describing the Storage of Data in PeopleSoft Databases	18
Describing the Delivery of the User Interface	20
Describing the Difference Between Development and Test Environments	24
Describing How to Find Information About Application Designer in the PeopleSoft Online Help	27

Lesson 3

Developing Applications with PeopleTools	33
Designing an Application	34
Activity 1: Designing an Application	36
Creating Data Structures	42
Activity 2: Creating Data Structures	47
Creating User Interfaces	53
Activity 3: Creating User Interfaces	62
Testing Applications	68
Activity 4: Testing the Application	69
Creating Fluid Applications	73
Activity 5: Creating a Fluid Application	80

Lesson 4

Using Views in PeopleSoft Applications	93
Stating the Purposes of Views	94
Writing SQL Statements to Retrieve Data	99
Activity 6: Writing SQL Statements	110
Creating PeopleSoft SQL Views	115
Activity 7: Creating PeopleSoft SQL Views	122
Creating PeopleSoft Query Views	128
Activity 8: Creating PeopleSoft Query Views	133
Creating PeopleSoft Dynamic Views	144

Lesson 5

Creating Summary Pages Using Views 149
 Explaining the Purpose of Summary Pages 150
 Creating Summary Pages Based on PeopleSoft Views 151
 Activity 9: Creating a Summary Application 154
 Determining the Key Structure for a Summary View 161
 Activity 10: Using Views in Summary Applications 163

Lesson 6

Creating and Using Search Records 171
 Explaining the Role of Search Records 172
 Activity 11: Modifying a Search Record 182
 Using Views to Provide Additional Search Criteria 187
 Activity 12: Using a Search View 197
 Implementing an Alternate Search Record 206
 Activity 13: Implementing the Add Search Record 208
 Activity 14: Creating an Application 213

Lesson 7

Implementing Search Pages for Fluid Applications 221
 Describing How the PeopleSoft Fluid User Interface Uses Search Pages 222
 Using the Search Results Page 234
 Incorporating a Search Framework-based Keyword Search into Fluid Applications 246
 Activity 15: Working with Keyword Search 250
 Incorporating Pivot Grid-based Real-Time Search into Fluid Applications 259
 Activity 16: Implementing Real-Time Component Search for a Fluid Application 267

Lesson 8

Using Views as Prompt Table Edits 281
 Setting Up a Prompt Table Edit that Uses a View 282
 Activity 17: Creating a Prompt Table View 285
 Explaining the Mechanics of Prompting 292
 Activity 18: Examining Prompt Table Functionality 293
 Creating Views that Take Advantage of Prompting Mechanics 297
 Activity 19: Enhancing the Student Suggestions Application 298

Lesson 9

Explaining TableSet Sharing 307
 Explaining the Functional Aspects of TableSet Sharing 308

Activity 20: Observing TableSet Sharing	320
Explaining the Technical Aspects of TableSet Sharing	325
Implementing TableSet Sharing	330
Activity 21: Implementing TableSet Sharing for the Maintain Purchase Orders Application	344
Activity 22: Using TableSet Sharing	352

Lesson 10

Creating Parent-Child Relationships	359
Explaining Methods That Enforce Referential Integrity	360
Creating Parent-Child Record Definitions	364
Activity 23: Creating Parent-Child Records in PeopleSoft Applications	370
Enforcing Parent-Child Relationships on Page Definitions	378
Activity 24: Creating Parent-Child Pages in PeopleSoft Applications	390
Activity 25: Creating Parent-Child Relationships	397

Lesson 11

Explaining Buffer Allocation	411
Discussing Buffer Allocation	412
Determining the Effect of Buffer Allocation on Performance	419

Lesson 12

Creating Subrecords and Subpages	425
Stating the Purpose of Subrecords	426
Creating and Maintaining Subrecords	429
Activity 26: Creating and Using Subrecords	433
Stating the Purpose of Subpages	437
Creating and Maintaining Subpages	440
Activity 27: Creating and Using Subpages	444

Lesson 13

Using Deferred Processing	451
Explaining the Purpose of the Application Server	452
Distinguishing Between Processing Modes	453
Changing the Processing Mode of a Definition	460
Activity 28: Working with Processing Modes	466

Lesson 14

Introducing PeopleCode in PeopleSoft Applications	473
Explaining the Purpose of PeopleCode	474
Activity 29: Observing PeopleCode in Action	476

Accessing PeopleCode Programs	481
Activity 30: Examining PeopleCode Locations	491
Exploring Selected PeopleCode Subjects	496
Using PeopleCode to Validate User Input	506
Activity 31: Writing PeopleCode Error and Warning Programs	510
Adding Comments to PeopleCode Programs	516
Activity 32: Using Comments in PeopleCode Programs	523
Creating Error Messages Using the Message Catalog	527
Activity 33: Using the Message Catalog	534
Performing Validations with PeopleCode	538
Activity 34: Writing PeopleCode Programs to Perform Validations	540
Describing RowInit and FieldChange PeopleCode	546
Describing Differences Between Object-Oriented and Procedural PeopleCode	548
Activity 35: Observing the Behavior of RowInit and FieldChange PeopleCode	552
Lesson 15	
Using Images in PeopleSoft Applications	559
Working with Image Definitions	560
Activity 36: Working with Static Images	563
Working with Images as Application Data	567
Maintaining Image Record Fields with PeopleCode	572
Activity 37: Working with Images as Application Data	578
Comparing Image Definitions to Images as Application Data	587
Lesson 16	
Creating and Using Style Sheets in Classic Applications	591
Viewing Relationships Among Style Sheet Elements	592
Activity 38: Working with Style Sheet Elements	602
Overriding the System Style Sheet	608
Using PeopleCode to Modify the Style Property of a Field Object	613
Activity 39: Using Styles in a Classic Application	614
Lesson 17	
Designing More Advanced Pages	621
Using the Message Catalog in Page Design	622
Activity 40: Using the Message Catalog in Page Design	625
Creating Pages with Alternate Data Displays	629
Activity 41: Creating Alternate Data Displays	638
Creating Links to Internal and External Pages	648
Activity 42: Creating Links in a PeopleSoft Application	659
Creating Pop-up Pages	666
Activity 43: Creating a Pop-up Page	677

Lesson 18

Final Course Activities	683
Activity 44: Troubleshooting Complex Applications	684
Activity 45: Creating a Complex Application	689

Lesson 19

Course Review	709
Applying PeopleSoft Design Methodology	710
Using Views in PeopleSoft Applications	711
Explaining and Implementing Tableset Sharing	712
Creating and Maintaining Parent-Child Relationships	713
Improving Application Performance	715
Creating and Using Subrecords and Subpages	717
Writing PeopleCode Programs to Enforce Business Rules	719
Enhancing Application Functionality using Advanced Features	720
Applying Additional Fluid User Interface Development Principles	721

Appendix A

Navigating in PeopleSoft Applications	723
Understanding this Appendix	723
Understanding Navigation	723
Using the Fluid Banner	724
Using the Action List	725
Using the NavBar	727
Using the Navigator Menu	728
Working with Global Search	731

Appendix B

Additional PeopleCode Exercise	733
Using PeopleCode to Manipulate Fields	733
Exercise: Modifying the T1_CUST_PROD Page	735
Exercise: Adding PeopleCode	736
Exercise: Testing the Application	740

