SpearMC
consulting ▲ technology ▲ sourcing

ORACLE Gold Partner
Specialized PeopleSoft 8.53
PeopleTools

PeopleTools I & II v8.53

Training Guide

Introductions

Course Instructor – John Beretz

- Professional PeopleTools Consultant - 10 Years
  - HCM, FSCM, Staffing
  - Enhancements
  - Upgrades
  - Occasional Instructor ☺
- Formerly Developer, PeopleSoft – 8 Years
  - Financials Applications
  - PeopleTools Reporting
  - Enterprise Services Management
- Expertise
  - User Experience Design
  - Software Architecture

About this Course

- **Goals**
  - Learn how to develop simple applications using PeopleTools
  - Basic understanding of PeopleCode
  - High-level understanding of PeopleTools architecture
  - A solid foundation for learning more
- **Accelerated approach**
- **“Hands-on” – activities accompanying each section**
- **Different method than traditional PeopleSoft course**
  - No step-by-step guide
  - Interactive
    - Q&A throughout sessions, and at the end of each day
  - Dynamically paced
  - Content tailored to most useful concepts and skills

Course Agenda (Subject to Change!)

- **Day 1: Fundamentals and Basic App Creation**
- **Day 2: App Creation Deeper Dive & Security**
- **Day 3: Advanced UI, Component Architecture**
- **Day 4: Enhancing with Basic SQL and PeopleCode**
- **Day 5: Advanced Techniques and Special Topics**

- **Will NOT cover**
  - Administration
  - Tools Configuration (App/Web Server)

Introductions

Tell me about yourself

- What's your PeopleSoft experience?
- Other technology experience?
- Technology interests?
- What do you like/dislike about PeopleSoft/PeopleTools?
- What will you be working on in the year ahead?

Housekeeping

- **Each day begins with review of material from day before**
- **Ask lots of questions**
  - If I don't know the answer I'll find it ASAP
  - Special topics: We'll circle back, time permitting
- **Breaks: Dedicated time for email, etc.**
- **My email: john.beretz@spearmc.com**
  - Send me comments, feedback, special requests anytime
- **Send me an email now**
  - Name
  - PeopleSoft User ID
  - Special topic you'd like covered
  - Having your email address means I'll be able to send you content during the week

Anatomy of a PeopleSoft Applications - Demo

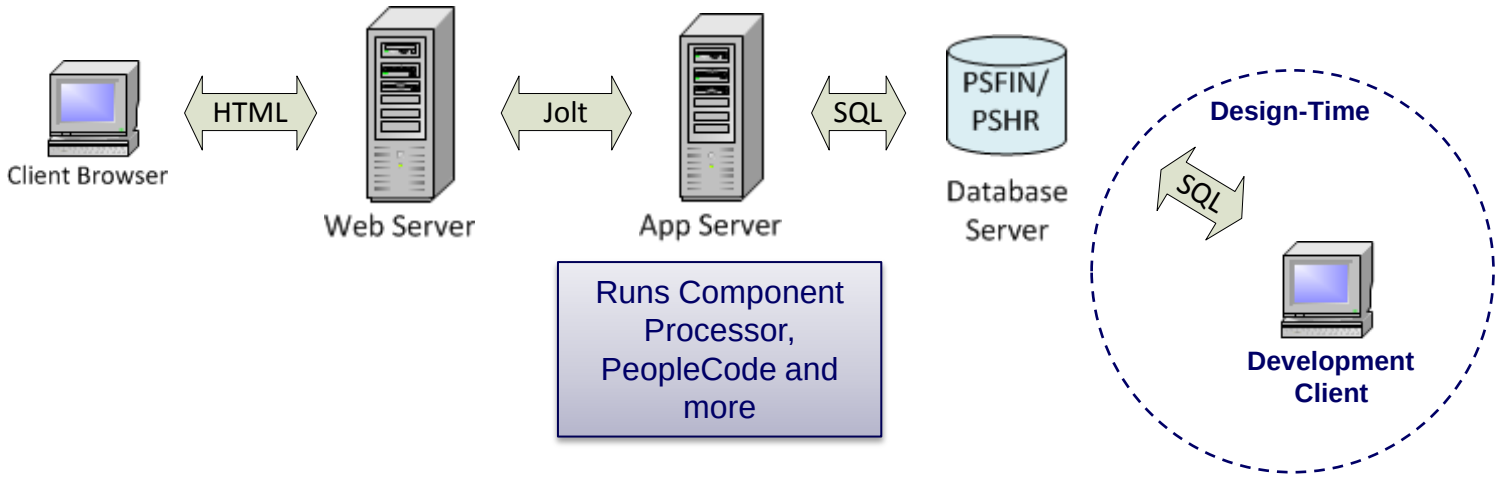
- **The signon page**
- **The portal home page**
- **The menu**
  - All functionality user has access to
  - Favorites
- **The search page**
  - Add: Enter key values
  - Find Existing
    - Enter search criteria – Basic and Advanced
    - Select item from results list
- **The pages**
  - Static text
  - Edit boxes and prompt lookups
  - Dropdowns
  - Checkboxes and Radio Buttons
  - Scroll Areas & Grids
    - Previous/Next
    - Export to Excel
  - Tab Bar
  - Buttons and Hyperlinks
  - Toolbar
    - Save
    - Return to Search
  - Portal links (Home, Sign Out)

What is PeopleTools?

- The technology behind PeopleSoft Applications
- Refers to the full technology stack
- Sometimes used to refer to just development environment

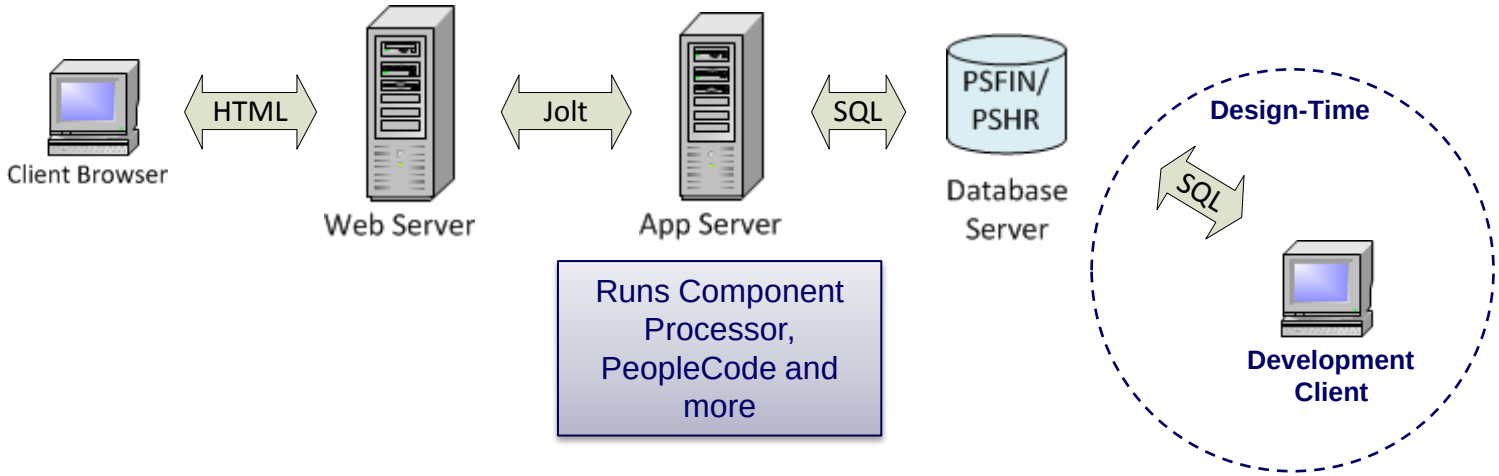
What is PeopleTools? Technology Overview

- Browser
- Web Server
- Application (“App”) Server
- Relational Database Server
- Development client (design-time)



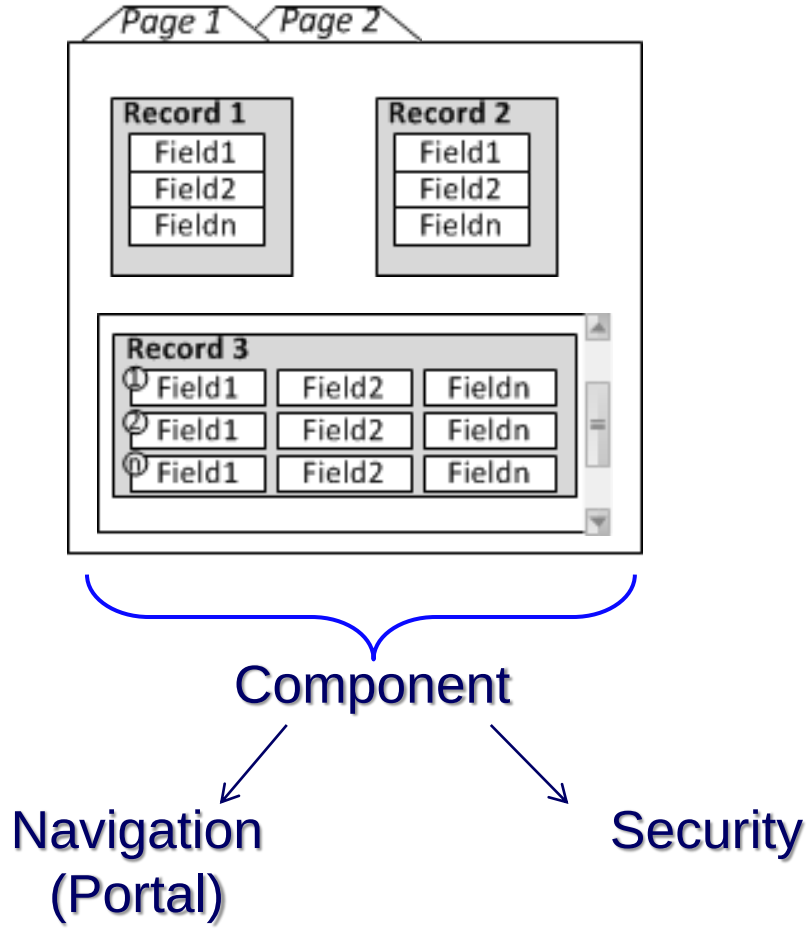
Where's the code?

- PeopleTools Applications are object based
- All object definitions stored in database, interpreted at runtime
- System Tables vs. Application Tables
- PeopleTools objects are created using Application Designer
- Delivered applications and custom applications use identical technology
- PeopleTools core technology
  - Developed in C++ and Java
  - Source code not accessible



Building Blocks of a PeopleSoft Application

- Fields
- Records
- Pages
- Components
- PeopleCode Programs
- Many, many more!



Records and Fields

- **Field**
  - Describes a container that can hold one piece of data
  - Properties include data type, length, labels

- **Record**
  - Describes a collection of Fields used together
  - Similar to beans, C STRUCTs, COBOL record layouts
  - Looks like a database table definition
  - The same Field can be reused on many different Record objects
  - Records used to build tables and design the data structure of pages

- **Records and Fields example (demo online)**

Pages and Components

- Page = web page
- Consists of page controls for display of data and user interaction
- Components allow for multiple, tabbed pages instead of one huge page
- Component/Page example (demo online)

PeopleTools Application Development Methodology

1. **Define the Problem**
2. **Design the Application**
   - Design Page and behavior
     - What controls?
     - What validation?
   - Design Search Page
   - Design Navigation
3. **Design Data - What information will be stored on what tables?**
4. **Create Data Definitions**
   1) Create Fields
   2) Create Records - Implements data and search page design
   3) Build Tables from Records
5. **Create User Interface**
   1) Create Pages
   2) Create Components
6. **Register Components**
7. **Define Security (usually handled by Register Components)**
8. **Test**

Creating a Simple App: Example

- **Define the Problem: Need way to track basic student information**

- **Design the Application**
  - Design Page: Student Page Mockup
  - Design Navigation: PeopleTools Training folder > Students
  - Design Search Page

- **Design Data**
  - Table for Students
    - One row for each student
    - Information (Columns, Fields)
      - Student ID
      - Name
      - Address

Introducing Application Designer

What is Application Designer?

- The software used to develop and modify PeopleSoft applications
- Integrated Development Environment (IDE) for PeopleTools
- Windows-only application (pside.exe)
- Connects directly to database (client-server)
- Login is same as application (online)

Introducing Application Designer

Application Designer Walkthrough

- Object work area
- Projects
  - Collection of objects
  - Useful for organizing all objects associated with an application or customization
  - Single project open at a time
  - Useful project options
    - Automatically add to project
    - Open last project at startup
- Output Window

Housekeeping:

- All custom objects will start with “Z”
- Your unique 2-letter object prefix (represented by “XX” in examples)

Activity: Create a Project

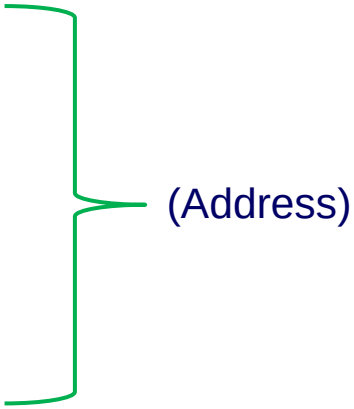
- ZXX_TRAINING
- Set useful properties (see above)

Creating a Simple App: Create Data Definitions

From the data design, create records and fields as needed:

- **New record: ZXX_STUDENT**

- **Fields we need already exist**
  - PERSON_ID (Student ID)
  - NAME (Name)
  - ADDRESS1
  - ADDRESS2
  - ADDRESS3
  - COUNTRY
  - CITY
  - STATE
  - POSTAL



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  - CITY
  - STATE
  - POSTAL

- **Edit Record-Field properties**
  - **Key**: Unique identifier of a row (PERSON_ID)
  - **Search Key:** Included as search criteria field and Add field (PERSON_ID)
  - **Alternate Search Key**: Included as search criteria (NAME)
  - **List Box Item**: Included in search results (PERSON_ID, NAME, CITY)
  - **Required**: User forced to enter a value (PERSON_ID, NAME)

- **Build Tables**
  - Save Project
  - Build project
  - Execute SQL Now

Creating a Simple App: Create UI

1. Define Pages

- Page for Students (ZXX_STUDENT)
  - Static Text
  - Editboxes
  - Group Box

2. Define Components

- Create component for students (ZXX_STUDENT)
- Add Page: ZXX_STUDENT
- Set search record in properties (ZXX_STUDENT)