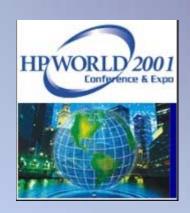
Designing and Building Web Application: Session: T240 Title:



Author: Wm. Matthew Street

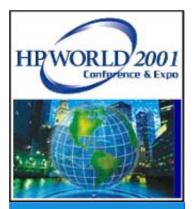
CEO

Company:

Orion Group Software Engineers 5770 Nimtz Parkway South Bend, IN 46628

(219) 233-3401 Phone:

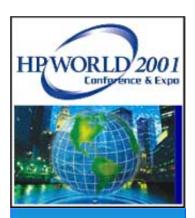
mstreet@ogse.com E-mail:



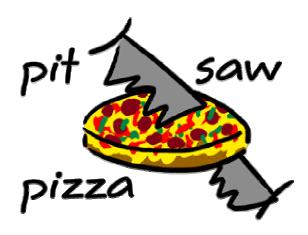
What We'll Cover Today

- Overview
- Definition of a Web Application Server
- Design Requirements of the Application
- Linking to and Modeling the Database
- Adding Business Rules
- Building the Application



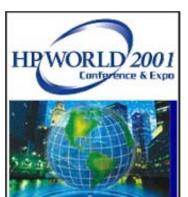


Overview:



- Make believe company that wants to allow customers order from their menu via the Web
- Have an Oracle Database containing their products and structures for storing customer and order information





Environment



Apache Web Server (On HPUX)



Develop on NT or OSX

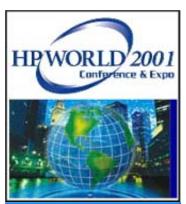


Oracle 8i (On HPUX)



Web Application should Deploy on HPUX



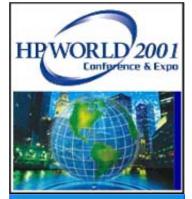


Application Server Software

- WebObjects
 - ScalableDeployment
 - Object OrientedDevelopment
 - Maintains SessionState
 - Java Based
 - Enterprise ObjectFramework







Who Uses WebObjects?



















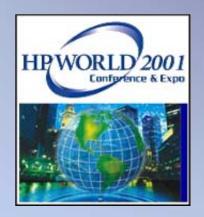
Stanford University





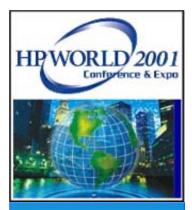
- Plus many others including:
 - Disney Travel, Fleet Financial
 - Aetna US Healthcare, Nissan, Toyota
 - Artisan Interiors





What Does A Web Application Server Do

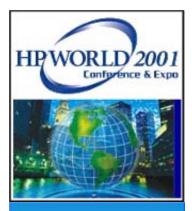
A Quicktime Visual Presentation



Development Cycle Steps

- Design, Design, Design
- Link and Module the Database into Enterprise Objects (EO's)
- Add Business Logic to the EO's
- Develop the Components ("Web Pages")
 - Make reusable components along the way.
- Test, Test, Test

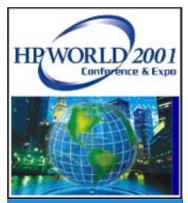




Design

 More time spent on design, less time spent on development

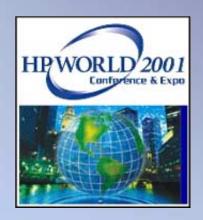




Link and Module the Database

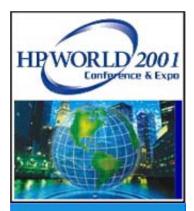
- EOModeler
 - Define the database to be used
 - Modify or define the entities (tables)
 - Modify of define the attributes (columns)
 - Modify or define the relationships
 - Add Fetch Specifications
 - Add rules
 - Generate the java code to represent the enterprise objects
 - Add business logic to the enterprise objects





Using EOModeler to define enterprise objects

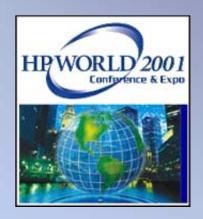
Demonstration



Build the project and components

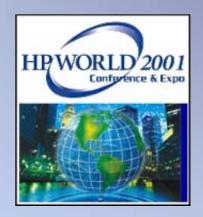
- Project Builder
 - Link EOModel to the project
 - Create Enterprise Object Java Classes
 - Define Web Server Resources
 - Graphics
 - Define Components
 - Java Class Files
 - HTML Files
 - WOD (Web Object Definition Files)
 - Launch and Test





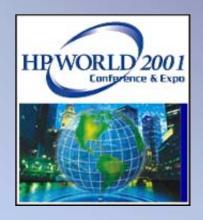
Project Builder Overview

A Quicktime Visual Presentation



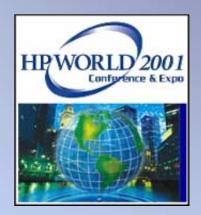
Using Project Builder to Define our Application

Demonstration



Examples of more Robust Web Applications Built with these tools and Deployed on HP-UX

Internet Demonstration



Questions