

Transcript and Presenter's Notes

Title: Java Pet Store Application

1

Java Pet Store Application

2

Outline

- Introduction
- Information Layer
- Application Layer
- Infrastructure Layer

3

Introduction

- Java Pet Store is a sample E Commerce application designed by Sun Microsystems
- Designed to show how to best use the capabilities of the J2EE platform
- Uses various other Java Technologies to develop applications which are portable, scalable and at the same time robust.

4

Introduction (contd.)

- Client Side
- Being a J2EE application, the Java Pet Store sample application can accommodate both browser and Java programmable clients.
- Server Side
- JSP (e.g. db_failed.jsp)
- Servlets (e.g. PopulateServlet.java)
- EJBs (e.g. CustomerEJB.java)

5

Information Layer

- Specifications for data related techniques.
- Application is designed to store data in various databases.
- Uses the Data Access Object (DAO) technology.
- For example CatalogDAO

6

Application Layer

- The website component of the application uses the MVC (Model View and Controller) architecture design paradigm.
- View- this is the presentation layer and displays the information on the GUI.

- Model - this is the database layer or the backend which also contains the information about the application.
- Controller- this is the business logic layer. This acts as a bridge between the view and the model layer.

7

Modules of the application

- Petstore- Petstore module provides the ability for customers to look at the pets, place order for them and view the result of their request.
- OPC- The Order Processing Center (OPC) module receives and handles the orders placed by the customers.
- Supplier- The Supplier module, which is also a Web interface sits between the database and the OPC.
- Administrator- The Admin module manages the order placements and is a JFC/Swing front-end interface

8

Infrastructure layer

- Hardware Platform-
- System Requirements for installing the JSDK on a Windows platform-
- Pentium 166MHz or faster processor.
- At least 32 megabytes of physical RAM is required to run graphically based applications.
- The amount of permanent hard drive space required is 120 MB.

9

Infrastructure layer (contd.)

- Softwares-
- The java petstore application can be run on any operating system which has JVM incorporated in it.
- Other softwares used in the Petstore application are-
- Java 2 SDK, Standard Edition (J2SE SDK), v1.4.1 or higher
- Java 2 SDK, Enterprise Edition (J2EE SDK), v1.3.1 or higher
- Application Server- Sun Java System Application Server Platform Edition 8 (included in J2EE SDK)
- JVM- version 1.3.1
- Database Software- Cloudscape (this is the default and can be changed easily)

10

Infrastructure layer (contd.)

- Security Services
- Web tier authentication

- authentication mechanism defined in the applications deployment descriptor.
- EJB Tier Authentication
- The J2EE 1.3 platform requires EJB containers and EJB client containers to support version 2 of the Common Secure Interoperability (CSIv2) protocol
- Controlling Access to Web Resources
- the security constraint can be specified in the web.xml file
- Controlling Access to Enterprise Beans
- the methods of the beans remote, home, local, and local home interfaces can be specified to have the security roles invoke it.

11

Infrastructure layer (contd.)

- Development Tools
- Java is the programming language
- Code generation tools like EJBGen (version 1.20 - an EJB 2.0 code generator)
- Verification tools like Sun RIs verifier
- Web page development tools- HTML, XML and XSL style sheets.
- Modeling tools like UML for creating the use cases
-

12

Questions!!

- Thank you