APG WebShop: Acme Plastic Gnomes Enter Cyberspace

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1 Introduction

Acme Plastic Gnomes are selling more and more gnomes each day and the CEO, Mr. S. Anta, has finally decided that the time is ripe for Acme Plastic Gnomes to enter cyberspace! The first attempts of devicing an electronic commerce infra-structure using pigeons and straw were complete failures. we will implement and deploy a working webshop in Java. You implement the webshop as a Web-application using the Java EE technologies, JSF and servlets, EJBs, and JPA , to be deployed and run on an application server, GlassFish.

2 Main problems and solutions

The main problem of this project, is that it can not operate on browsers like google chrome and Internet explorer. It can only works on firefox.

3 Implementation platform requirements

- *Operating System : Microsoft windows*

- *Programming Language : Java Enterprise edition 1.6*

- *Ide : Neatbeans 6.1*

- *Browser : Mozila*

4 Implementation Technology requirements

- *Database : Derby*

- *Database Technology : Java Persistent api (JPA)*

- *Architecture : Enterprise java beans (EJB)*

- *Programming language : Java enterprise edition (JavaEE 1.6)*

5   Instructions on how to run the application

In order to run this application, first of all we need to run "Glass Fish Server", which you have to run it in Netbeans. Along with the server, the database in this case its java derby should be also running and the connection between the application and the database would be established. there is no other thing to do except that user should enter the URL address of the web shop in her/his browser. Therefore, the main steps of running the application are:

1. *Already installed derby*

2. *Running the Glassfish in Netbeans*

3. *Bulding the project and deploying*

4. *entering the url address in the browser*

6   Interfaces and Interactions

A normal user or the web-shop administrator can login to the system via the login page. In the first page, a new user can create a new account or login to the system via his username and password. The username will be checked in the databese not to be repetitive. Figure 1 shows the first login page.

Having logged in to the web-shop system, the items in stock and ready to use will be shown in the table as illustrated in figure1.

Figure 3 depicts the selected items by user2, and he is ready to press check out and buy the products.

Finally, figure 4 demonstrates the basket after buying the products. As you can see, the basket has been emptied after the action completes and the total price must have been withdrawed from customer account automatically. This of course has not been implemented in this project; however, this can be easily implemented via the Bank project from previous experiences.

The web-shop administration is done via web interface and through the login page. The is a group of admin who can login the system and add, remove, update and do all the administrational procedures. Here, figure 5, exemplifies the login procedure of admin user in to the system.

Figure 1: This is the first page of the project, amin and users use this page for login or users can register themselves via button create new account
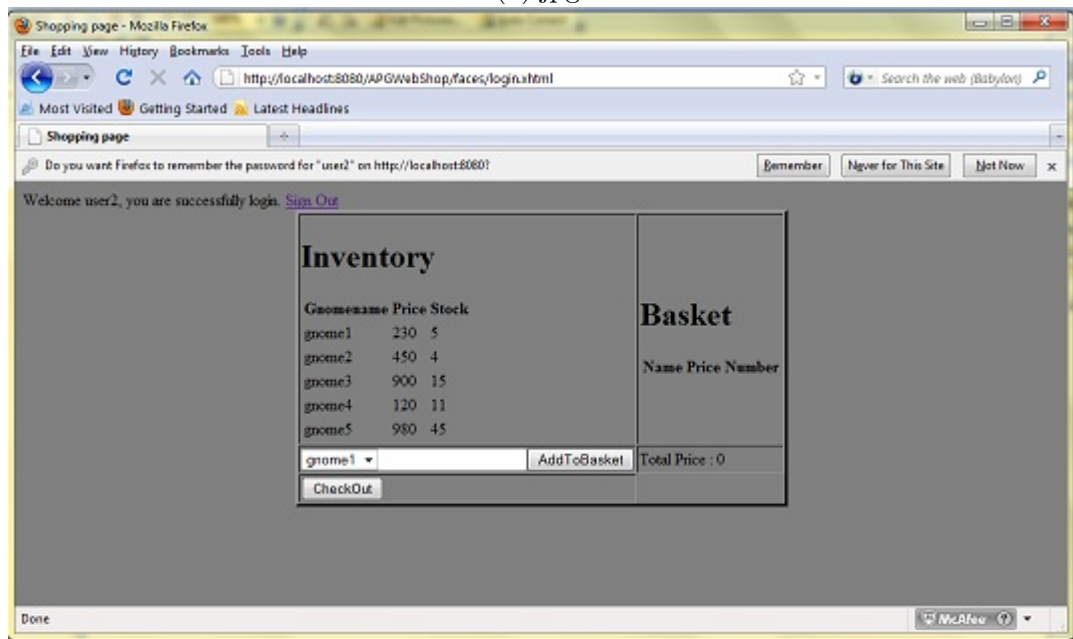
Picture (1).jpg

Figure 2: This page is the shopping page. users can see the gnomes available for sale and they can add them to their basket and finaly with cheking out they can buy those gnomes. total price is also mentioned below the page
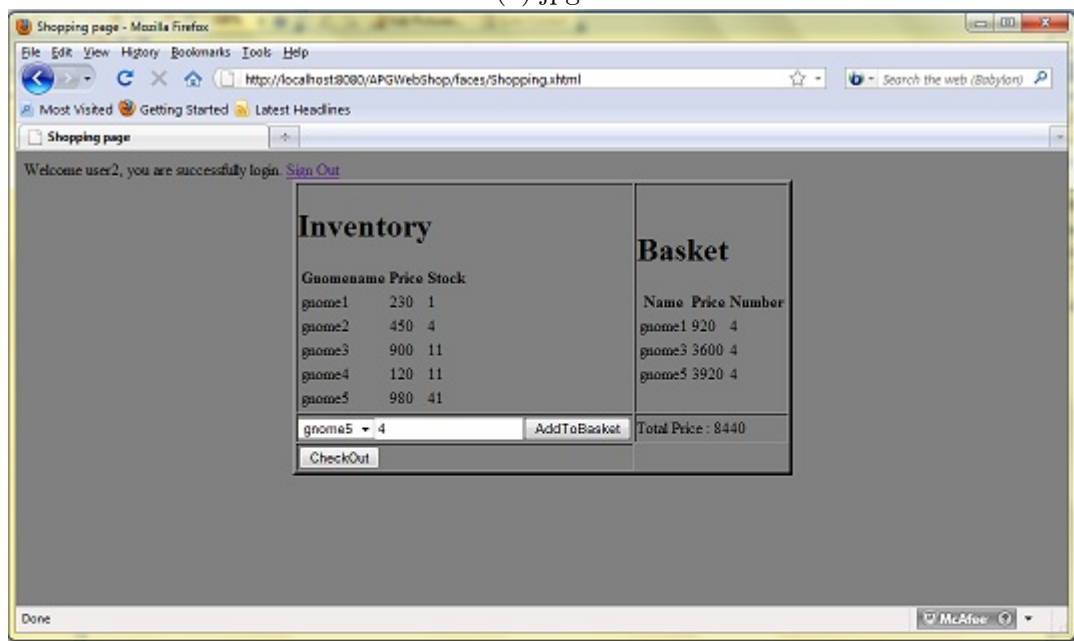
Picture (2).jpg

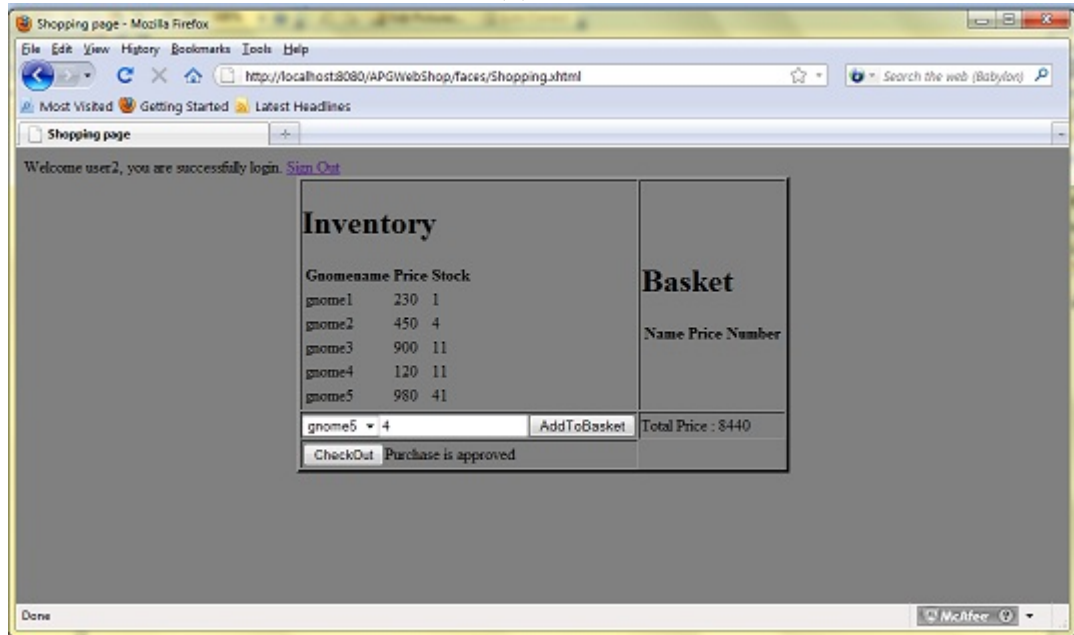Figure 3: This picture shows the basket when some gnomes are added by the users.

Picture (3).jpg

Figure 4: This picture showsw hen user buys the products

Whenever the admin logs in the system, a web page similar to figure 6 will be generated and shown. In this page, the admin can manage the database and add, remove and update the gnome items in the database and correspondent tabels.

As an example, one of the gnome items in this table has been deleted by admin and figure 7 shows the deleting and updating a row in the tabels.

Furthermore, figure 8 illustrates adding a new row to the table (Inventory) and this recently created item also is shown in the table below.

Figure 9, also, depicts the create new account page which enables user to create a new account for themselves. The username will be checked in the database (UserAuth table) not to be repetitve and the password and confirm password field also must be the same. Having done this procedure, a new account will be generated and the user will be redirected to the login page. On that web page, the user must enter the username and correct/correspondent password to be authenticated and able to use the system.

7 Uml Diagrams

Picture (5).jpg
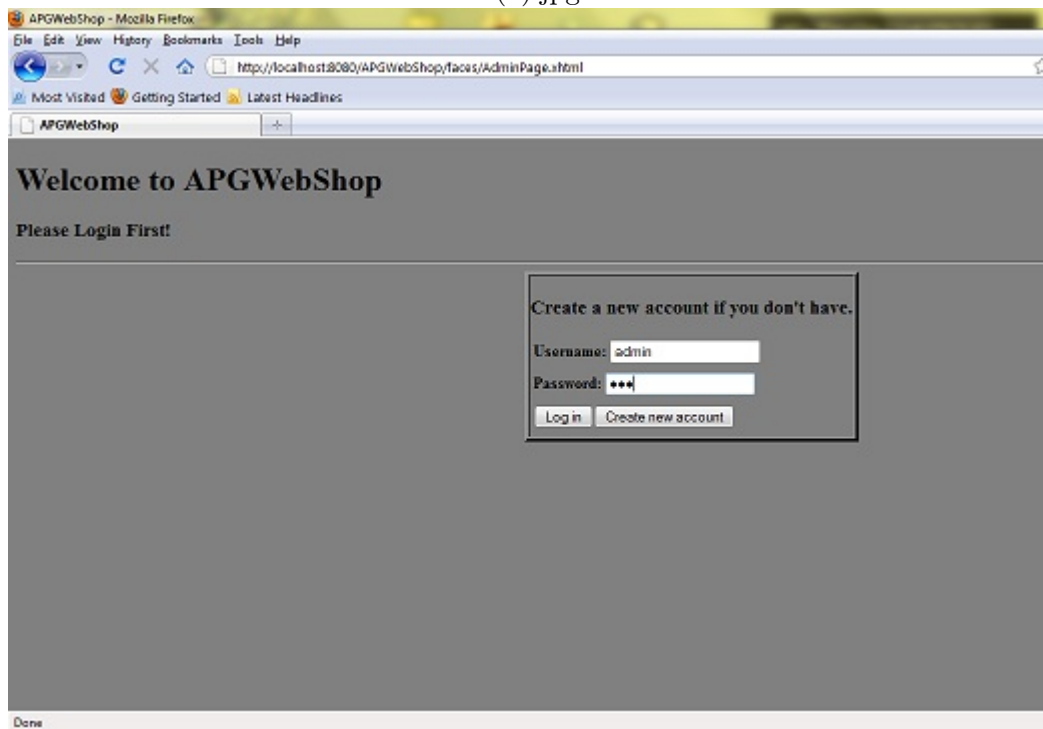
Figure 5: When an admin user wants to login to the system

Picture (4).jpg
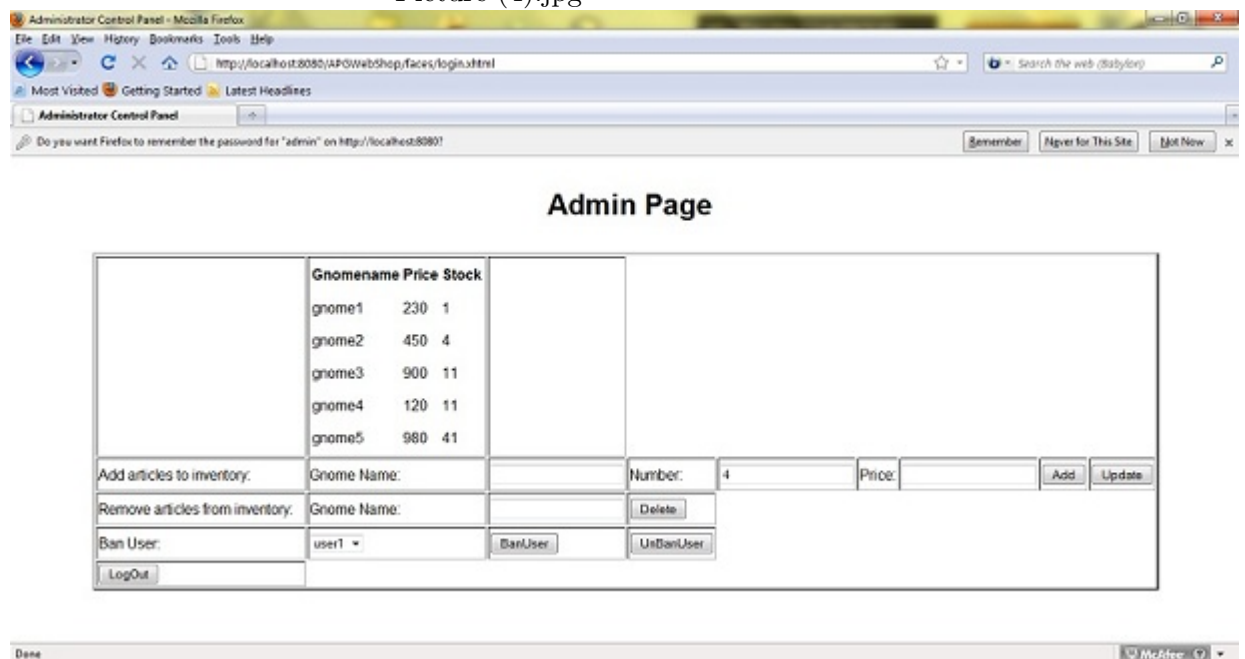
Figure 6: This picture shows the complete control of the admin users, an admin user can add , delete and update gnomes in the database, also admin can ban or unblock the users from accessing the database
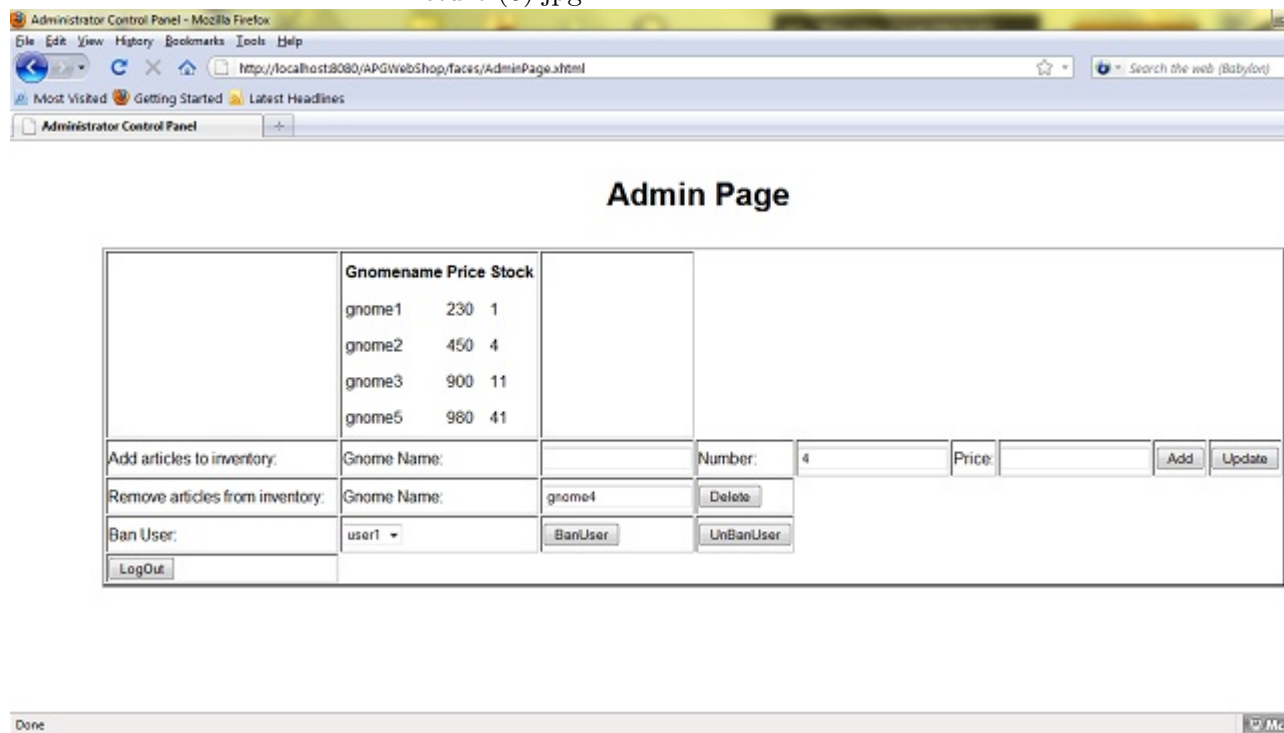
Picture (6).jpg

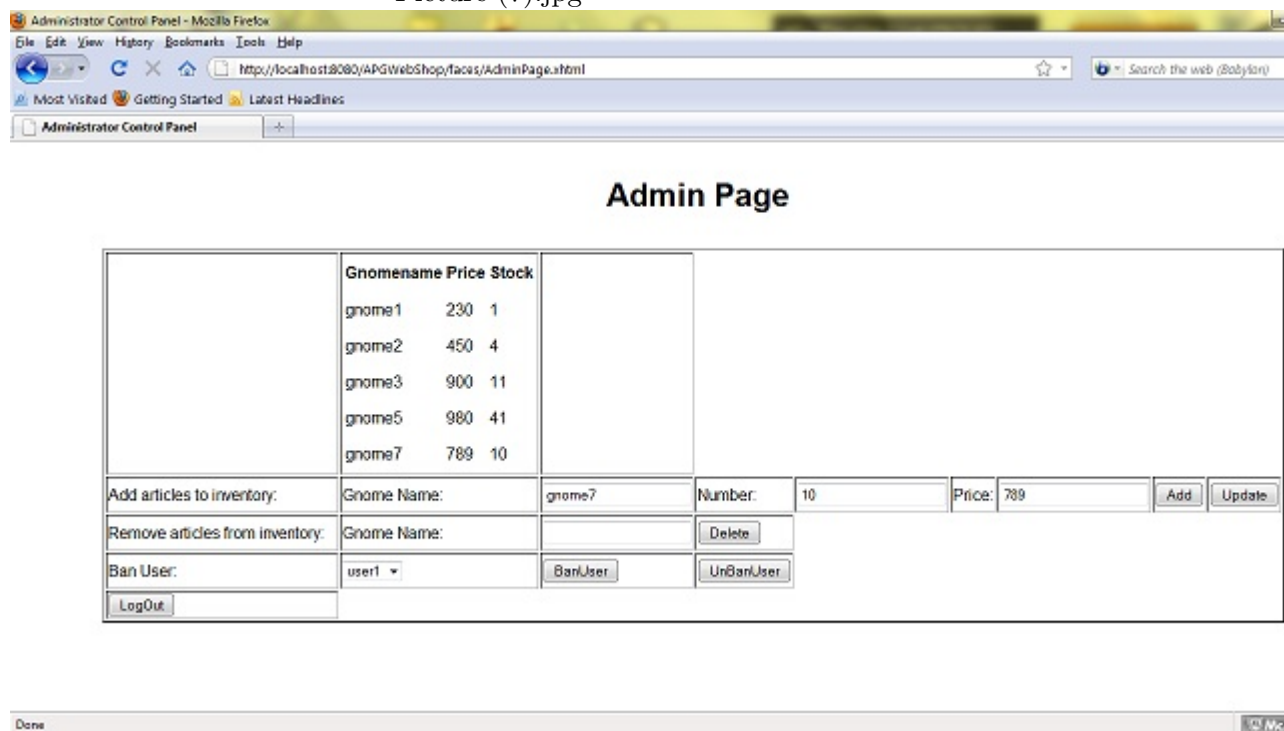Figure 7: Shows when gnome4 is deleted from the database

Picture (7).jpg

Figure 8: shows when gnome7 is added to the database

Picture (8).jpg

Figure 9: the page which users can register themselves

Figure 10:

Figure 11: