OPEN SOURCE SOFTWARE LAB (15B17CI575)

Lab Assignment 10 (Practice Lab)

Odd 2022

Week: 18th Nov- 24th Nov

Topic Coverage: Java Servlet and Java Sever Pages (JSP)

Resources:

https://www.javatpoint.com/servlet-tutorial

https://www.javatpoint.com/jsp-tutorial

Problem:1 Write a Program to build a book online store that uses session tracking.

Part-1: The first subsection shows how to build pages that display items for sale. The web page will display item description like: Item Id, Item Name, Item Cost and item description stored in the catalog.

Part-2: The second subsection shows the page that handles the orders. It uses session tracking to associate a shopping cart with each user and permits the user to modify orders for any previously selected item. The third subsection presents the implementation of the shopping cart, representing individual items and orders, and the catalog. The "order page.java" servlet handles the orders coming from the catalog pages as given in part-1. It uses session tracking to associate a shopping cart with each user. Since each user has a separate session, it is unlikely that multiple threads will be accessing the same shopping cartsimultaneously.
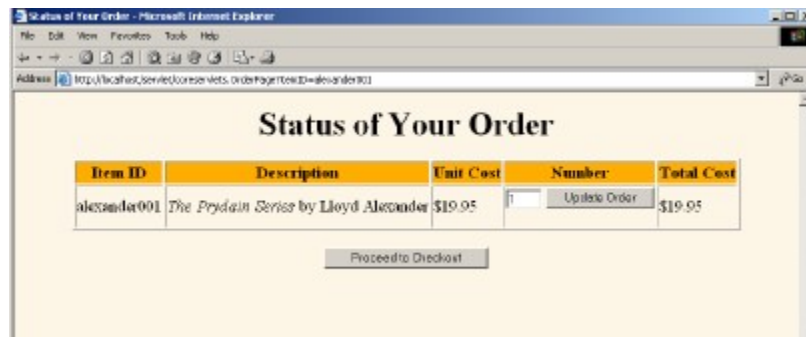

Figure-2 Order status

Problem:2 A distance-education MBA course program has to offer to its students an on-line registration facility. You are required to develop this module for the institute keeping in mind the

following:

(a) The MBA institute maintains a small database, which stores the following information related to a student:
   • Name
   • Qualification
   • WorkingOrganization
   • Address & PhoneNumber
   • Login andPassword
   • Courses that the student is registeredin.

(b) The server also maintains a list of 20 courses together with their course codes and credits in a courses database. Also maintained is the information regarding the date and time of mid- semester and final examination for each course. The mid-semester exams for all the courses are held only in the following fourslots:
   • Slot 1 2-Sep 2010 FN 10 am to 12am
   • Slot 2 2-Sep 2010 AN 3 pm to 5pm
   • Slot 3 3-Sep 2010 FN 10 am to 12am
   • Slot 4 3-Sep 2010 AN 3 pm to 5pm
   • Similarly final examinations have the followingschedule:
   • Slot 1 28-Oct 2010 FN 9 am to 12am
   • Slot 2 28-Oct 2010 AN 2 pm to 5pm
   • Slot 3 29-Oct 2010 FN 9 am to 12am
   • Slot 4 29-Oct 2010 AN 2 pm to 5pm
   Note that, a particular course will have both the mid-semester and finalexaminationinthe sameslot.

(c) Each student is allowed to register only for a maximum of 4 courses. When a student logs in, he/she is represented with a list of courses and their examination slots. The student is allowed to make choices for the courses for which he/she wants to register. (Use checkboxes to take the studentinput)
(d) While registering a student for a particular course, you have to take care that the student does not register for courses that have examination at the sametime.
(e) Provide the logoutfacility.
(f) Provide the student with the facility to view his/her registrationcard.

Problem3: Create a shopping web application for a particular domain like food, gadgets, textiles, etc. Selected domain must have at least 5 different categories of products. While shopping, products for each of these categories must be available on next/new page .Selected items must be visible in the cart on every page. You must have options to continue shopping or check out. On clicking check out display the items with bill and options to add more items and remove existing individual items from the cart. After that user is displayed with the option to pay now. On clicking pay now user is switched to payment gateway of some bank. At this stage user is asked to enter credit card details. After verification of credit card details user is confirmed for the transactions details and proceeds further to complete transaction. Make appropriate assumptions wherever required. Create required tables in appropriate normalform.

Problem:4 Suppose that you want to make a "one-stop searching" site that lets users search any ofthemostpopularsearchengineswithouthavingtoremembermanydifferentURLs.Youwant to let users enter a query, select the search engine, and then send them to that search engine's results page for that query. If users omit the search keywords or fail to select a search engine, you have no site to redirect them to, so you want to display an error page informing them of this fact.
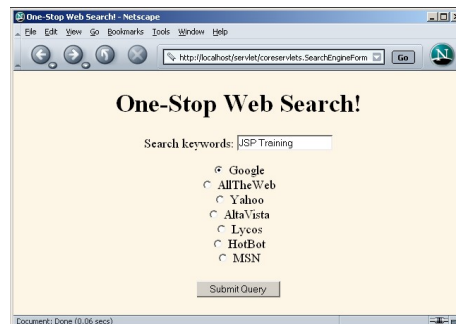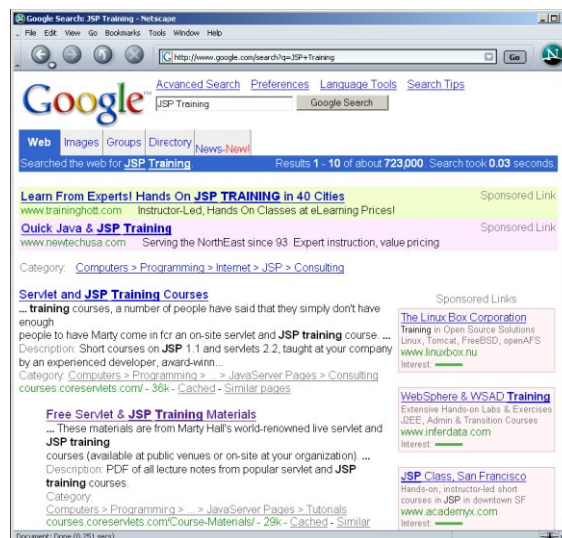

Figure1: Front end to the SearchEngines servlet.

Figure2: Results of the SearchEngines servlet when the form of Figure1 issubmitted.
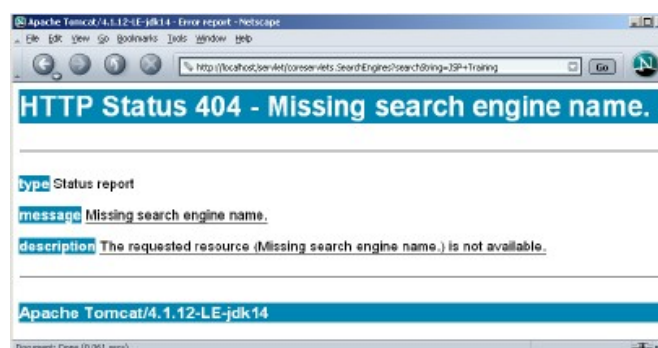

Figure 3: If not able to get search engine page and in your servlet code implement response header extraction code.(not warning given by Internet explorer or any other web browser)

Problem:5 Create a simple interface for Reminders that consists of **Four buttons**. The three buttons will implement the **Today's Reminders, week Reminder, Month's Reminder functionality** and last button will be **All reminder button which t**hat will show a **date wise sorted list** of all remainders in a table format. In addition, you will bind the date fields with the remainder table which will access SQLdatabase.

REMINDERS

| Today View | Week View | Month View |

| All Reminders |