CGS4854 PROGRAM 2 COVERING CHAPTER 2

Due Monday, May 21st, 2012

You are to create a service oriented web site, in other words a website as interesting as Facebook.
You will be adding features throughout the semester. The type of service that you provide is your choice.
Choose a service that interests you.

- Create a new web application in NetBeans, name it your lastName+InitialOfYourFirstName
- If there is not a web.xml file in the WEB-INF folder, then select New File -> Web ->
  Standard Deployment Descriptor (web.xml) from the NetBeans menu.
- Modify the index.jsp that is in the root of the web app. Be sure it uses the the new, simpler HTML5
  doctype.
- Add a paragraph of at least four sentences that describes the service that you are providing.
- Validate the JSP at http://www.w3c.org.

Servlet Controller
- Implement a servlet controller for your application. The controller should behave like the servlet
  controller from Chapter 2 of the book.
- Modify Edit.jsp. Instead of the Hobby property used in the book, use two properties of your choice.
  - These properties should be useful in the web site that you are developing.
  - Do not use first name and last name. Be creative.
  - Think of a web site that you would like to create and pick two properties that are specific to
    that type of service.
  - Later in the course, you will be adding additional fields to this site for an integer, a floating
    point number and a calculation using these numbers.
  - Think of a site that will be able to be expanded in this way.
- Modify the confirm and process pages with the new properties from the edit page.
- Add appropriate paragraphs for your application to the edit, confirm and process pages.
  These paragraphs should contain descriptions of each page. If you do not have good paragraphs,
  you will lose points on the assignment. Pretend that this is a real web site that users are accessing.
  These users do not know anything about your site. There should be information on each page explaining
  what service you are providing and what the user is supposed to do on the current page. Unless you are
  William Faulkner, a paragraph contains more than one sentence.
- In addition to the Edit, Confirm and Process pages, create another JSP that will also display the data
  that is sent to it. Name the page WishList.jsp.
- The WishList.jsp page will display the data from the fields that are sent to it, but will not let the
  user edit them. Eventually, this is a page where users will be able to store information, without
  purchasing it.
  - Add an appropriate description to this page for your web application. If you do not have a good
    description, then you will lose points.
  - Add buttons to the wish list page that can send the user's data back to the edit page or to the
    confirm page. Do not add a button for the process page.
  - Add a button to the confirm page that can send the user's data to the wish list page.
    This is a new button, in addition to the edit and process buttons. Do not add a button to either
    the Edit page or the Process page for the WishList page.
  - Add a hypertext link in the index.jsp page of the username web app to the visible URL of your
    controller. Use a relative link.
  - Edit tomcat users Be sure to modify the project so that the .java files are placed in the WAR file:
    Configuring WAR File

- In NetBeans, select Clean and Build to recreate all the files in your web application.
  This will also create the WAR file for the web application.

If you have time in this short (6 weeks semester) we will implement the following steps to configure
the Tomcat server.
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NOTE:
During our last class I showed in class how to log into a webserver, upload webpages and/or documents,
change access rights and allow users to access the new additions/modifications to a webpage.

The following are standard instruction during a 12/14 week semester:

- The web app must use the secure web.xml file and should only allow you and me to access your
  application:

Configure the Tomcat server:
  If you have not already received your host number from me, then do the following.

Connect to ocelot (this is server at FIU)
  Change the permission on the ~ folder to 705.
  Edit the .cshrc file that is located in your home directory. Add the following statement to the end
  of the file. Be sure to hit enter at the end of the line.
  umask 072
  Log out and then log in again. This will implement the change you just made. From now on, all your
  folders and files should be created with the correct permissions.
  Create and validate your webapps folder on ocelot and request your student host. You may use winscp
  to create the webapps. Use these step-by-step instructions to create the ROOT web app using winscp.
  Do similar steps to create the manager web app, but be sure to use the web.xml file for the manager.
  Access the Tomcat server by using the student host that I send you:
  http://student99.cgs4854.cs.fiu.edu:8008/
  Access the manager application through the student host that I send you:
  http://student99.cgs4854.cs.fiu.edu:8008/manager/html
  Deploy the Web Application

- Connect to ocelot.aul.fiu.edu using winscp (or another secure shell telnet program). Your username is
  your panther mail and the password is first initial, followed by panther id, followed by last initial.
  If you do not have one then, create a folder named cgs4854 on ocelot.
  Navigate to the directory on your local machine that contains your NetBeans project, then open the dist
  folder.
  Copy the WAR file from your local machine to the cgs4854 directory on ocelot. Do not copy the WAR file
  to the webapps folder.
  Right click the name of the WAR file in the remote window of winscp. Select Custom Commands and then
  select Enter. Be sure to check the box for Show Results in Terminal.

  If the name of the war file is your-user-name.war, then enter the following command into the command
  box   and hit enter. Replace your-user-name with your user name. Replace your-user-name with your user
  name unzip -o your-user-name.war -d webapps/your-user-name
  Modify index.jsp in the ROOT Web Application

  In winscp, navigate to the cgs4854/webapps/ROOT folder.
  Create a file named index.jsp.
  Enter all the HTML tags for a standard page.
  Use the strict DOCTYPE (or the HTML5 one).
  Validate the page at http://www.w3.org.
  Add a relative hypertext link to your username web application. Remember that /on Tomcat means
  webapps/ROOT in the file system and /username means webapps/username in the file system.
  Add a relative hypertext link to the manager application. The absolute link to the manager is
  http://student99.cgs4854.cs.fiu.edu:8008/manager/html
  Add a paragraph of at least four sentences that describes your web site. This paragraph must be
  different from the other two that you have created.
  Access the Web Application

  You should now be able to access the ROOT web application with
  http://student99.cgs4854.cs.fiu.edu:8008/
  From this page, you should have a link to the root of your username web application.
  After clicking the link, you should have a link to the JSP for this assignment.
  You can also access the manager with
  http://student99.cgs4854.cs.fiu.edu:8008/manager/html
  Try stopping the username web application, then try to access the application from the web.
  You will receive an error.
  Next, try starting the username web application, then try to access the application from the web.
  You should now have access.

Handing in the assignment
  To hand in the assignment, zip your cgs4854 directory and upload it via the web: Submitting
  homework on-line via the Web.
  Please use the following command to compress your cgs4854 folder. Change to your root directory
  on ocelot and issue the command
  zip -r username cgs4854 -x \*.jar \*.zip \*.war
  Replacing username with your user name.
  If you have any other archived files in your directory, like .rar, or .ZIP, or .WAR, please
  remove them before zipping.
  Check the size of the ZIP file, it should be less than 1 MB. If it is not, then you probably
  have another ZIP file stored in the ZIP archive. Delete it and re-zip.
  Use my uploading program from ocelot to upload the file. ~downeyt/public/webftp/webftp.pl
  Upload the file as binary.
  Be sure that all your files and subdirectories are included in the zip file.
  After uploading, do not modify your files on ocelot until after your assignment has been graded.