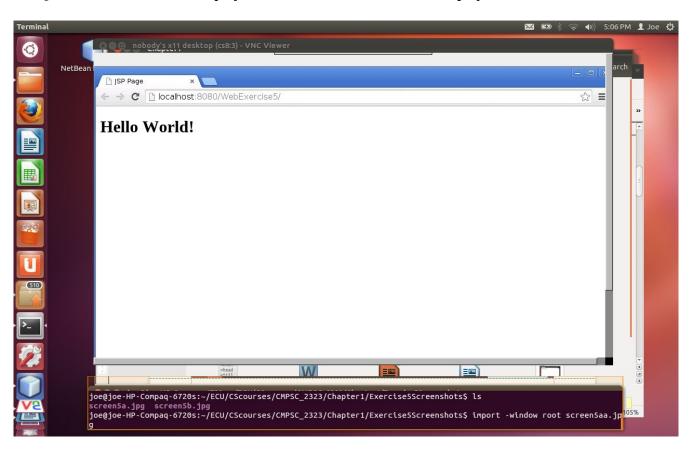
CMPSC 2323 Internet Programming

Netbeans Web Application: Lets create a simple web application using the Netbeans Integrated Development Environment (IDE). The application will display a web page.

Launch Netbeans. After Netbeans is up, create a new web application project as follows.

- 1. In the Netbeans menu, select File->New Project. This displays the **New Project** window. In that window under **Categories** select **Java Web** and under **Projects** select **Web Application**. Then click the Next button. This displays the **New Web Application** window.
- 2. In the **New Web Application** window type WebExercise5. Then click the Browse button and navigate to a directory where you would like to save your Netbeans project. Then click the Next button. This displays the **Server and Settings** window. Just click the Next button in this window. This displays the **Frameworks** window.
- 3. In the **Frameworks** window select **Struts** (followed by some *version number*). Then click the Finish button.

The above procedure creates a Netbeans web application named WebExercise5. On the left side of the Netbeans display, under the Projects tab, you should see WebExercise5. If WebExercise5 is not in boldface, right click on WebExercise5 and select Set as Main Project from the choices displayed. Now WebExercise5 is displayed in boldface.



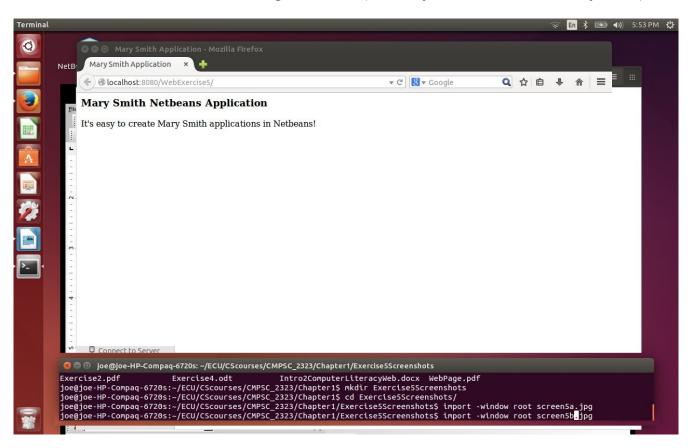
Run web application WebExercise5 by typing the £6 function key. Be patient, it takes a little time the first time the web application is run. Eventually, you see Mozilla Firefox display a web page similar to the screen shot above shown on the <u>previous</u> page.

Lets make a few changes to the web application to display a personalized web page. In the Netbeans display under the Projects tab, click to the left of WebExercise5 to expand it. Under WebExercise5 expand Web Pages and double click index.jsp. This displays a file index.jsp in the edit area in the Netbeans display. Scroll down the edit window to examine the contents of the file. Lets change the welcome title, heading and message as follows (in these changes replace Mary Smith with your first and last name everywhere Mary Smith occurs).

- 1. Between the <title> and </title> tags, replace JSP Page with the following title: Mary Smith Netbeans Application
- 2. In the <body> and </body> tags, between the <h1> and </h1> tags, replace Hello World! with

It's easy to create Mary Smith applications in Netbeans!

Run the project again by typing the £6 function key. What do you see displayed in the web page? You should see what is shown in the following screen shot (but with *your* name instead of Mary Smith).



HTML: Lets add some HTML code to the Netbeans web application in the *body* of the web page, in file index.jsp displayed in the edit window in Netbeans.

We will add some HTML code immediately before the end tag </body>. The end tag </body> should be the *next to last* line in the file. Add the following HTML code immediately before </body> tag.

```
<form action="about:blank" method="post">
Enter some text in the area below. <br>
<textarea name="content">
</textarea><br><br>
First name:<br>
<input type="text" name="firstname" value="Mary">
<br>
Last name: <br>
<input type="text" name="lastname" value="Smith">
<br> <br>>
<input type="radio" name="sex" value="male">Male
<hr>
<input type="radio" name="sex" value="female" checked >Female
<br> <br>>
Click the submit button to display a blank web page<br/>
<input type="submit" value="Submit">
</form>
```

As always, change Mary Smith to *your* first and last name. After adding the above HTML code to file <code>index.jsp</code> save your changes and run the project by typing the £6 function key. What do you see? Enter some text in the text area, enter *your* first and last name, select the appropriate radio button, click the submit button. Navigate *back* to your web page.

On the Netbeans display under the Projects tab for project **WebExercise5**, expand Libraries. Then expand JDK 1.6 and expand GlassFish Server 3.1.1. You see a number of so-called jar files (files with the file extension jar). A jar file is a Java Archive file. A jar file is a Java package which is something like a C library, e.g. a library corresponding to header math.h. The Java programming language, Internet programming and web pages are <u>all</u> related. In chapter 2 we will begin a study of the Java programming language to enable us to do some network programming and interact with HTML.

Submit Web Exercise 5 to Blackboard (15 points)

When you complete the exercise, *compress* your Netbeans project and submit it to Blackboard on or before the due date. The <u>due date</u> will be announced in class and posted on Blackboard.