

Homework Assignment 5

Java Servlets/Java Server Pages

ECE 155B – Spring 2012

Due Wednesday, June 6

In this assignment you will explore Java Servlets/Java Server Pages as a method of augmenting HTML Web pages with dynamic content for your Healthcare System.

Requirements

This assignment requires that you modify your Healthcare System to run using HTML Web pages and Java Servlets/Java Server Pages using HTTP, instead of Java sockets, for connectivity between the patient and the doctor. The client is a Web browser that provides the same Graphical User Interface (GUI) but with HTML components (tables, buttons, forms, etc.) and the same functionality of the Healthcare System. On the server-side, a Java Servlet will perform all the processing that the doctor requires and will provide dynamic content to the patients, such as their appointments, patient information, appointment scheduling, etc. The Java Servlet will connect to the MySQL database using JDBC. For the Doctor's side, you should be able to use the Database from Assignment 4 without modification. For the Patient's side, you should first convert all your XML files to the database (like what you did for your Doctor in Project4). You will continue to use RMI communication between the doctor and the pharmacy (which means you won't modify anything from project 3). For this assignment, you will need to use Java Server Pages.

Optional [10 points]

For extra points, you may also provide a Web interface for the pharmacy using Java Servlets/Java Server Pages to enable a patient to check his/her prescription status at the pharmacy (that means you build your pharmacy side using HTTP as well). The patient will submit his/her information using a Web browser, and the pharmacy will list the prescriptions for the patient.

Design Considerations

When developing your Web-based Healthcare System, you can organize your code into templates that can be pieced together dynamically by your Java Servlet. This type of implementation can substantially reduce your overall code size. The same types of GUI elements are available in HTML as you used previously and, thus, you can maintain the overall look and feel of your GUI. Feel free to build your project based on the project template provided in the class Web.

Report

In addition to the program, you will need to submit a small report. The report should be clear, well organized, and concise. It needs to include the following:

- 1) An overview of your Healthcare System using Java Server Pages
- 2) Details of how your implementation works.

Submission

You will submit a compressed file (*rar*). You will need to type "*ant submission*" in order to create your submission file. If there is anything missing in the submission file, edit the *build.xml* file to include the missing information. Make sure you modify the *User* property in the *build.xml* file. The *ant* call will create the submission file with the username you provide.

The compressed file should include a folder with all project content necessary to build/run the program (.java, .jsp, README, Report). The projects are to be sent to ece155b.s12@gmail.com with the subject line "Project 05: FirstName LastName".