

HW1: Message Board Servlet

Introduction

For this homework, you'll create a servlet-based message-board web app. In doing so, you'll practice several skills:

- Checking out and committing projects in Subversion
- Implementing Java servlets
- Making HTML web pages
- Tagging revisions of projects in Subversion

Step 1. Checkout a project skeleton

Rather than starting from scratch, you're going to build up your project from a basic skeleton.

To get a copy of your skeleton, repeat Step 5 from HW0 with the following modifications:

- **URL:** https://utopia.cs.memphis.edu/course/comp4081-2012fall/uuid/YOUR_UUID/
Where you should replace *YOUR_UUID* with your actual UUID.
- Fill in the **User** and **Password** fields with the UUID and password you emailed me for HW0.
- Checkout the **trunk** subfolder of **MessageBoard**, and name the project **MessageBoard**.

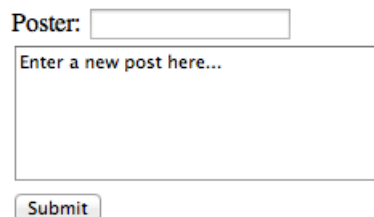
This time around, you can commit changes you make to the code into the repository. Do so by right-clicking on the project in the **Project Explorer**, and clicking **Team** → **Commit**. A dialog will pop up that shows you what files are being added/removed/updated and that allows you to enter a log message describing what changes you made.

Step 2. Build a message board web app using the skeleton

Your main task for this homework is to build a message-board web app. It must look and work exactly like the one in this demonstration.

Demonstration scenario: Buzz and Woody meet on the message board

Woody opens the message board servlet, and sees the following:



The screenshot shows a web form for posting a message. It consists of three main elements: a text input field labeled "Poster:" with a small rectangular box next to it; a larger text area with the placeholder text "Enter a new post here..."; and a "Submit" button located below the text area.

He enters his name and a message:

Poster:

Hi,
Would you like to be my friend?

And then he clicks Submit:

Woody

Mon Aug 06 16:02:49 CDT 2012

Hi,
Would you like to be my friend?

Poster:

Enter a new post here...

Buzz opens the message board on his computer, and sees Woody's message. He types in his response:

Woody

Mon Aug 06 16:02:49 CDT 2012

Hi,
Would you like to be my friend?

Poster:

Are you an alien?

And then Buzz clicks Submit:

Woody

Mon Aug 06 16:02:49 CDT 2012

Hi,
Would you like to be my friend?

Buzz

Mon Aug 06 16:04:16 CDT 2012

Are you an alien?

Poster:

Enter a new post here...

Woody reloads the message board, and sees Buzz's question. He crafts his response:

Woody

Mon Aug 06 16:02:49 CDT 2012

Hi,
Would you like to be my friend?

Buzz

Mon Aug 06 16:04:16 CDT 2012

Are you an alien?

Poster:

No, I'm a cowboy!

And then Woody clicks Submit:

Woody

Mon Aug 06 16:02:49 CDT 2012

Hi,
Would you like to be my friend?

Buzz

Mon Aug 06 16:04:16 CDT 2012

Are you an alien?

Woody

Mon Aug 06 16:05:20 CDT 2012

No, I'm a cowboy!

Poster:

Enter a new post here...

Additional requirements and constraints

- Implement only one Java servlet class for this assignment.
- In addition to the servlet, you may want implement plain old Java classes (POJOs).
- Use “real” package names, such as **edu.memphis.messageboard**, for your classes. Do not use the default package (i.e., one with no name).
- Use only plain old HTML (no CSS, JavaScript, etc.). See the Resources link on the course homepage for HTML reference materials.
- Don’t store messages on disk. Keep them in memory so that they are destroyed whenever Tomcat stops.
- Your servlet must handle both HTTP GET and POST requests.
- Hint: The date functionality comes from the Java API (in the **java.util** package).

Step 3. Submit your work (by tagging it)

Congratulations! You’ve made it to Step 3. You’re almost done.

To submit your work, you must tag it. Then, I will checkout the revision that you tagged and grade it. By tagging, you tell me that you are done, and this is the version you want me to grade.

For this homework, you must create the tag **HW1**. (For the next homework, you'll tag your submission as **HW2**, and so forth.)

Attention! Before tagging, it is a good idea to make sure that you committed all your local edits to the repository.

To tag the current revision of your trunk as **HW1**, do as follows:

1. Go to the **Java EE** perspective in Eclipse.
2. In the **Project Explorer**, right-click on the project folder that you want to tag, and click **Team → Tag...** This should bring up a **Create Tag** dialog box.
3. Enter **HW1** in the **Tag** field, and add a log message in the **Comment** box. Click **OK**.

To verify that tagging was successful, go the **SVN Repository Exploring** perspective, find your project folder in the **SVN Repositories** view, and look in the **tags** folder.