COMP4711 Lab 11 (Winter 2009) Dates: Mar 30-Apr 3, 2009

Ajax Processing

Background

We have an XML-RPC client/server application to do a survey. Let's do the same kinda thing, but using AJAX and a web application.

Note 2:

This is the last formal lab for the course. The remaining labs can be used to work on the last assignment, or to get help with any unresolved issues or coding techniques.

Note 3:

If all you want is the bare-bones DOJO toolkit, that is accessible as "dojo.js" in the tools folder on share-out.

Note 4:

The full DOJO toolkit (the zip file) is needed to do the tutorial, even though the survey webapp (to hand in) only needs the bare-bones one.

Note 5:

A solution for last week's lab has been posted in the solutions folder for COMP4711 on shareout, in case yours did not work.

Lab Tasks

- 1. Start a new project for this purpose.
- 2. We will be using the DOJO toolkit to make life easier. A copy is in the tools folder on shareout. Extract it into the "web" folder of your webapp project, under a suitable name (eg "is" instead of "dojo-release-1.2.3").
- 3. Read/work through the <u>Hello World Dojo for the Attention-Impaired</u> tutorial. It is part of the "Book of DOJO", an excellent learning resource. Amongst other things, the book goes into much more detail on XHR and some of the UI widgets available, if you want to use them.
- 4. Copy your SurveyServer interface and the SurveyHandler implementation from last week's project (or the solution). They will be used as-is for the current project.
- 5. You want to make the SurveyHandler a singleton, so that all of the users of your webapp share the same survey results.
- 6. Modify your index.jsp to display the same survey as last week, but as well-formed HTML. Your JSP will need to get an instance of the

- SurveyHandler, from which it can use the survey() method to retrieve the data that needs to be converted into HTML.
- 7. Make a VotingServlet, which takes a parameter "vote" and passes it on to the vote() method of the SurveyHandler, and then returns the name of the most popular survey result as its total response.
- 8. Your JSP will need to make an HTML form, with a text-field to hold the vote that a user wants to make. The "action" of this form should be mapped to the VotingServlet, but the handling of the "submit" button should be done using AJAX, with the result from the servlet used to update a suitable "div" somewhere on the web page (eg Winner is <div id="winner"></div>)
- 9. Thus, every time someone uses your webapp to vote, the page is updated in realtime without a page refresh.
- 10. Zip up your project, and submit the zip file to share-in, using a suitable name, like ParryJimComp4711Lab11.zip.

Marking Guideline

This lab will be marked out of 10 ... no specific breakdown yet.

Submission

• Due by the end of the weekend (sunday 11:59pm)