Session 6 Development Notes

Code and application delivery:

- Folders to be copied:

On CD:	Drag and Drop To:
jax_ws-2.0	C:\msis531\java\lib
dojo_examples	C:\msis531\src\examples
gwt_examples	C:\msis531\src\examples

Web services examples:

- The directions for building the web services example are available on a separate web page; we'll follow those through to create the sample in NetBeans.
- This article was composed by someone who probably doesn't write for a living. Some of the steps are a little hard to follow, but they do work, and I'll go through them in class with you.
- The structure of the ServiceImpl class is unlike anything we've seen previously. This example makes use of a JDK 1.5 feature, annotations, that greatly reduces the complexity of Java code (for web services in particular, and Java classes in general).
- One of the nice features of NetBeans is its support for unit tests. We'll create a unit test that, as a side effect of running it, creates a web services client that invokes our server and tests it.

dojo examples:

- The dojo examples just need to be opened in NetBeans as a project from c:\msis531\src\examples, using the same process we've used all quarter. This project runs from the "built-in" Tomcat.
- Everything in this project is under the Web Pages folder—the examples are client-side JavaScript. I think you'll agree, though, that they offer some very nice functionality.
- The default page for this project, index.jsp, uses an HTTP META tag to redirect the browser to another page. This technique is worth noting if you need it in the future.
- All of the HTML pages in the dojo folders use the strict XHTML DTD. This means that the HTML conforms very "strictly" to an XML DTD that dojo can count on when parsing the page. We'll talk about the benefits of doing it this way (and the downsides of not following this standard) in class.
- The main dojo library (dojo.js in the main Web Pages folder) is worth taking a look at. There are no comments, and lots of numeric variables. As a coding style, this leaves a lot to be desired, but since it's a bolt-on package, we'll let the dojo development team own the problem.
- The back button is problematic throughout this application; the browser back button is unavailable, and the supplied button does not always return you to the right place. Note this problem is not specific to dojo or AJAX, but to HTTP-based applications in general. If you can't get back to the main page, just put your cursor at the end of the URL and hit enter to return to the main page.

Google Web Toolkit examples:

- Open the gwt_examples project in NetBeans from c:\msis531\src\examples, using the same process we've used all quarter. This project runs from the "external" Tomcat, startable from c:\msis531\scripts.

- There are several build steps in the Ant build script we'll need to go through before running the application; we'll cover these in class.

- The GWT is amazing in that it builds static, AJAX-enabled pages from Java sources. It also captures session state in an IFrame, so the back button works correctly.