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CS 551

February 1, 2013

## Final Project Evaluation

### Discuss how well your project satisfies your original project specifications.

The original requirement specification for this project stated documents should be savable, sharable, assignable, and evaluable. To complete the final presentation, our final project was narrowed in scope to include only group management and document retention. The underlying technical implementation would quickly support the final assignment and assessment functionality, but we fell short on time by about six hours. It is an unfortunate six hours because it would have really rounded out the project and gave it a final look and feel of a working application. While the canvas drawing features exceed expectation, there’s not much useful about the way it works because it’s locked in a system without public sharing or download capability.

### Were you satisfied with your design process?

Iteration one and two were smooth. We started to feel pressure during iteration three as we basically redesigned the application from scratch twice at this point. I am glad we have a full report at the end of this project. It gives it an official stamp of a finished project. However, during the project development, documentation really seemed to intrude on available development time. I appreciate feeling actual pressure to produce deliverables on an aggressive timetable.

### How helpful was the agile process?

The agile process is a great work flow model. We would list a collection of tasks, spread them out over the iterations, and plan accordingly. By iteration three and after our first Smart Cloud server takedown, the agile tracking in Agilefant was not well used in our project. We continued the process over email and a couple of meetings. I am grateful we were not constrained by rational unified process. The agile process gave us the liberty to explore technology while implementing it.

### How would you do the agile process next time?

I would like to try a test-driven approach, because NUnit seemed like such a disappointing framework compared to JUnit. Our NUnit testing on web services was fairly useless and nonfunctional. It is clear we have much to learn about the NUnit documentation and how it can help us next time. I will use Agilefant again, but I will spend more time learning the system. In this project, Hussam was the primary agilefant manager and I was more involved in development solutions. I would like to take a step back and work on project management and really narrowing scopes to timeframes.

### Did you stick to your project plan schedule?

For the most part, yes. However, at iteration three, we had to crash the project to achieve a number of SQL queries and application features. Furthermore, we ditched JQuery Mobile only to re-adopt it for iteration four.

### What was the real management structure in your group?

Hussam and I chose tasks that we felt our skills were suited to accomplish. I had previous experience deploying applications to SQL Server and IIS, so I set up our servers. It was not much more difficult to quickly learn how to deploy a Tomcat hosted solution such as Agilefant. Agilefant’s documentation is thorough in this regard.

### Does it bear any resemblance to structure that you had planned?

One planned task may not go as planned. An example in our project was the complexity of drawing in the HTML5 canvas element. Working with a canvas is subject to performance constraints, then saving the canvas to a database for retrieval and editing is subject to certain manipulation of the document object model (DOM). We had not accounted for this learning curve and it threw off our time table.

### Did you have any problems getting each member to do his/her share of the work?

Hussam and I worked well together. Anything I asked of him was done, and done efficiently. The Android webview application was important to me, but I was not going to have time to complete it. Hussam produced a working webview application for Android. In addition, the task of planning through Agilefant was not something I wanted to spend time doing when I could be writing a report or developing more solutions. Having Hussam maintain the project management database was valuable.

### Do you have any suggestion on how this could have been handled better?

Considering the size of the class and scope of the project, I feel this was a good approach. It would require an unreasonable amount of time, but it would be nice to have an overwatch style of project management where we were delegated assignments and tasks that were closely watched for mistakes. An aggressive supervision style would have forced us to work better, but I think it would be too much work for a single instructor or TA in a class this size.

### Discuss what you might have done differently if this were a real world project.

I used my current skill set to develop my first mobile application. I would not have done this with different technology. I will next time, but I am happy about the development approach we took. In a real world project, I think I would spend more time planning the architecture and classes. When I develop “on the fly” like this, I tend to write code where I need when I need it rather than develop more reusable solutions.

### Any recommendation for next year?

The critiques were a constant onslaught of busy work. I would reduce the number of critiques by about 25% and spend the remaining time in code review. I would like to have the opportunity to help other teams and learn from them. The other teams could have taught me about better ways to use or develop web services. In hindsight, I wish I had seen their service implementation before iteration two so I could get some ideas. Had I learned about JQuery Mobile from Kendall Bingham’s group, I think I could have completed the project instead of feeling like I ran out of time. Likewise, I think I could have helped some groups with their ASP.NET or C# implementation.