Final Report for @10Dance

Group B4

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| 0.1 | 12/02/07 | SM | Initial Document |
| 0.2 | 04/23/12 | TW | Added Todd’s reflection |
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Time for reflection! The purpose of this document is to capture student experiences – both positive and negative – during the semester long team project. What are the key events that are to remembered? What are the key lessons that you learned that you can carry over to future projects. Think back starting from the time the teams were assigned, then project proposals were made, screenshots developed, requirements, architecture, framework demo, test plan, and finally the demo. What would you do different if you were assigned the same team and the same project again?

Each team member is to record his/her thoughts on a separate page. Thanks!

# Team Member 1: Brandon Maxwell

## What went Wrong

## What went Right

## Lessons Learned

# Team Member 2: Curtis Ullerich

## What went Wrong

## What went Right

## Lessons Learned

# Team Member 3: Yifei Zhu

## What went Wrong

## What went Right

## Lessons Learned

# Team Member 4: Todd Wegter

## What went Wrong

In this project, not many things went terribly wrong. The project involved concepts that were novel to all of us, so there was a very steep learning curve. Two main hitches occurred in the creation of our attendance system. The first problem we discovered was that we could not have objects as parameters for something being stored in the Google App Engine’s Datastore. This surprised us and required us to do a complete paradigm shift in how we were storing things in the datastore. Instead of storing objects as parameters for an object, instances of an object stored references to other objects in the database. This added complexity to the inner workings of the project.

The other major hitch we encountered was that the datastore could seemingly not handle polymorphism or inheritance in the objects we were storing in the datastore. The datastore would sometimes store objects as the actual type, and sometimes it would store them as the parent type. Then when we would try to find all instances of a certain object in the datastore, the query would not return all of the entries. We could not diagnose this issue or find any other information regarding similar issues, so we solved the problem by flattening our Java hierarchy. This prevented the datastore from becoming “confused” over the type of an object.

As a team, we worked well together for the most part. One team member didn’t do as much work, which caused frustration among other members. It seemed as though that member didn’t understand that we had a deadline to meet and that we all needed to push towards the end to get the project done. Other than that, however, we worked well together and had very productive meetings.

## What went Right

One of the best parts of our group was its commitment to the project. On the whole, we were very dedicated to the success of the project, and we were willing to do whatever it took to see that the project would succeed. We started coding within the first couple weeks of the project, which greatly enhanced our ability to have a working project to demo at the end of the semester. All of our team members put in a large number of hours (some more than others) every week to ensure the success of the project.

Our decision to host our app through the Google App Engine also turned out to be a good decision despite the limitations of its datastore. At least one of these limitations could have been anticipated if any of us had had any experience with databases, so that issue wasn’t really GAE’s fault. The free hosting that GAE provides and the way it manages the app will be great for actually using this application with ISU’s marching band. The features provided by GAE will make maintaining the system much easier (and cheaper) for the directors of the marching band.

## Lessons Learned

I learned that starting early is the best thing you can do in a project. I already had an understanding of this concept, but this project really drove it home. I also learned that choosing a good team is everything. I knew two of my three teammates before the project, and I knew that they would work hard. This turned out to be a huge advantage. Since I had handpicked teammates that would work as hard as me, I wasn’t the only one pushing to start early and get things done. This made for a much less stressful environment.

On a less philosophical note, I learned a ton about web development. This is great knowledge to have under my belt. I am sure that I will use this knowledge multiple times in the future. I also learned that software documentation is a lot more effective when completed before the software it’s outlining is completed.