Software Engineering Group Project 15

Final Report

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Management Summary

The project overall was a success, especially with the final solution we created; however, there were certain problems which we encountered during the time on development on the solution.

The state of the project currently is that all features (bar dying at the end of ageing) are implemented on a single server setup, with minimal amount of bugs across the system. However, we have not implemented Server-to-Server integration on our solution, but there is a framework with a single entry point where data can be accessed by a remote server. We decided that dropping this functionality would be better for the overall project, as having a rock solid platform for the functionality to be integrated at a later point is far more important than a lackluster approach to all the programming and have a half working solution by the submission date.

I feel we did work well in a team, with everyone knowing what needed to be done, and after a brief lesson on how Github and its issue tracker worked, it gave a good pace to the development. Also we managed to split into a "paired programming" methodology in Integration and Testing week, which worked wonders with the productivity of the overall members which might have been lacking at the start of the week. However, all this learning was at quite a late point in the project, and if we learnt these invaluable lessons at an earlier point, we would have had a better working project at the end of the I&T week.

It was a shame that Charlie Bird did leave us at a point, as he did give contribute to the project at points, and due to his unforeseen departure, I did spend a couple of hours understanding what he put into the project with no handover message from him.

Apart from these minor issues and problems we encountered during our time on the project, I feel that we have created a piece of software that we should be proud of!

Timeline of the Project

Requirements Document

- Job allocation was made for researching different types of software we needed to utilise for creating the solution, such as IDEs, deployment solutions and version control systems to name a few. We used
  - Eclipse for the development
  - Glassfish as the deployment solution
  - MySQL for the storage of data
  - JPA for accessing the data
  - Git for Version Control
  - Microsoft Word for documentation
- Initial job allocation for members of the group, which gave a basis for the rest of the project.
- Mock up of the interface was created for the requirements specification, which went on to inspire the current theme we used in the final solution

Testing Document

- Grant was allocated to design a testing scheme for integration and testing week, and he and Charlie wrote the testing document according to the functional requirements specified by the client.
- During this time, Kamil rewrote the UI to implement a more stylish and finished look onto the UI ready to be implemented.

Design Document

- Fiona and Imran were tasked with the design document, with Kamil often lending a hand with explaining and quality assurance on the overall document.
- Sam had been working on implementation of authentication and registration of users ready for the display.

Integration and Testing Week

Monday
- First meeting at 9AM with a plan of action for the rest of the week
- Morning was used for setting up development and production servers and sorting out arising issues
- Afternoon we implemented retrieving monsters and friends from the database when a user has logged in

Tuesday
- Morning was used for testing the first milestone with registration and login for the testing team while the development team carried on implementing the friendship options, including adding and deleting friendships
- Afternoon, I got the documentation team to start responding to feedback on the documentation we have already submitted, while giving an outline for the final submission documents.

Wednesday
- Morning, the testing team tried out the new bug fixed login system with the added functionality for friendships, During this time, Kamil, Sam and Andy were working with getting the RequestDispatcher framework working with Fighting and Breeding.
- Afternoon, we started implementing the main monster algorithms including breeding and fighting, which we perfected when working later into the night.

Thursday
- Most features were implemented by the morning of the Thursday, so the testing team worked on bug testing the system at a whole, and started submitting bug issues on the Github web interface. During this time, Andy was spending time working with the graphics and layout, while Kamil and Sam were working on bug fixes and last bits of the required functionality.
- In the afternoon, all submitted documentation was assessed and brought upto a final draft.

Friday
- The morning was used to clean up some final bugs before submitting all code to blackboard and then running through the acceptance tests in the afternoon.

Final Report

- Kamil and Sam rewrote parts of the UML design which was flawed when implementing the original design document.
- Sam help finish and finalise the documents ready to be submitted.

Final State of the Project

The final state of the project is one of near completeness when running with just one server. The only issues we have found is minor bug problems (such as parsing user IDs to the jsp to display not working correctly) and an issue with the way we implemented the

Performance of Members

Sam Sherar <sbs1> - Team Leader

I feel that I worked well managing the team during the time across the project with the limited tools I had, and I am happy with the amount of work I submitted during integration and testing week towards the main codebase. However I could have been more available during the first semester for more questions from the team.

Kamil Mrowiec <kam20> - Co-Team Leader

I feel that Kamil worked incredibly well over the time spent on the project. He always very prompt to all meetings and had always had something to contribute to the project. He also was not afraid to challenge certain decisions, which spawned some great ideas!

Fiona Joseph Samy <fij1> - QA Manager

Fiona is a hard worker, especially when it comes to researching new material and other ideas. I felt that she could have been more productive if she wasn't afraid to ask me questions about certain topics, but overall I am happy with the amount of work she produced.

Andy Watkins <ajw14> - Design Team

I feel that Andy did contribute to the project by creating most of the User Interface from design to production, but he did not produce as much as I was hoping for, as certain social networking sites easily distracted him. However, the work he did produce was solid and adhering to the coding standards we implemented.

Imran Mungul <Imm5> - Design Team

Imran was a hard worker to start, but I felt his motivation dipped over the course of the project, and by Integration and Testing week, it was hard work to get him going on a task. But after he got going, the quality of work and attention to detail was superb, and trying to understand new concepts introduced by Kamil or I didn't faze him.

Grant David <grd3> - Testing Team

Out of the rest of the team, I was most impressed by Grant - not by the amount of work he did, but the way he tackled challenges presented to him in a very can-do manor. He was

always asking questions about how things worked and wasn't phased when I asked him to program some Java for JUnit after proclaiming in the first meeting that he cannot program.

Cellen Williams <cew10> - Testing Team

Cellen worked well within the team and helped create some really well written and laid out documentation during the time he was with the group, and I found that he was happy to ask questions about topics which I might have glossed over. However, I think that he would have been more productive if he took his initiative, as he often had the right answer to start with!

Change log

Version	CCF Number	Date	What Changed	User
1.0	N/a	31.01.2013	First Draft	cew10
1.1	N/a	10.02.2013	Filled in and proofread	Sbs1