



Features and Cuts

Have you completed the major functionality and features listed in your original SRS?

We were not able to complete all of our major features that we listed in our SRS. This is because we underestimated the work load of the features in regards of the resources we had. With four developers it is true that there is less overhead to deal with. However, it is also true that each feature takes longer to build. Additionally, there were many small features that in hindsight seemed too small to be their own feature so we did not list them as such. When it came time to implement them, it became apparent that they were in fact their own features.

What about the extra features and frills you listed? If not, why not?

Given that we had to cut and reorganize features, we were not able to work on any of the extra features that we had stated in our SRS. It truly was a challenge to even get the primary features completed, and we therefore decided that we would focus on the basic concept of the application which is the in-class experience. We wanted to ensure that our application's core functions worked, rather than having many more features that would fail in its execution.

Did you add any additional features that were not listed in the SRS?

One feature that we did not list as a primary or stretch feature is the timeline view which is a page that visually graphs the activity of the feed. We were initially unsure of its applicability within Incognito and felt that it would not be included as a feature. However, after we finished our paper prototype exercise, we realized that the timeline graph was an effective solution to addressing our concern of Incognito being a distraction. Therefore, in our beta release, it was listed as a primary feature, and we were able to implement it in subsequent releases.

What features did you cut to help you complete the project in time, and why did you choose these to be cut?

For our beta release, we added in basic framework, bug reporting and help, student and instructor surveys, video tutorial and the timeline page and removed spam prevention as well as instructor history. For feature complete release, we removed the video tutorial from our primary feature list. At the time of our Release Candidate, spam prevention, and saved sessions were cut from the primary feature list.

We decided to cut these features because we felt that our remaining time should focus on presenting Incognito and its potential more than worrying about perfecting less fundamental

features such as spam. Although we realize such features would indeed be necessary in the future, at this point we want to present the main goals of Incognito including questions, feedback and surveys. Therefore, it is certain that our product is still in its early stages as we did not focus on details such as spam and security which should both be implemented in the future. We also do not have any fancy features that could be integrated into the system later, due to time and resource constraints. What we do have is a small preview of what Incognito can become.

How much work do you estimate you saved by cutting these features?

The time that we gained from cutting these features is substantial. As previously mentioned, we struggled with our adjusted primary features. Cutting these features helped us in implementing and integrating our major features with those that we had not planned to be features on their own.

Task assignments

What ended up being your team members' current roles?

Since our team was rather small we predicted correctly in saying that most of us would have to switch roles or play multiple roles throughout the quarter. Amanda was our PM so she focused on our documentation and the wiki throughout the quarter. However, once we passed beta release and had functioning features, Amanda also acted as our QA, running through basic use cases and filing issues. Robert was truly our back end lead this quarter and implemented most of the back end functionality as well as provided unit tests for most of the files. Although Mike was initially appointed as a back end developer, he was switched during Beta Release to the front end and remained there for the rest of the quarter. Mike also managed most of the setup and maintenance of technologies that we used such as Google Groups and Google Code. Christine was responsible for putting together the basic zero feature UI and then worked on front end programming for the rest of the quarter. Christopher did some back end development before moving on to working on our bug reporting and help pages which were mostly front end.

What occupied the majority of each team member's time and workload?

Amanda: Towards the beginning of our Beta Release, Amanda worked a lot on refining our System Architecture to become more modular and helpful to the team. Later on setting up the testing structure including PHPUnit test, JSunit (which we don't use anymore) and Hudson. After that Amanda spent most of her time working on the wiki, documentation and QA.

Robert: Worked almost entirely on the back end except for some time spent catching bugs on the front end of the application. The components that Robert spent the most time on was the course management, sessions, the timeline, and surveys. In addition, Robert spent most of his time later working on unit tests for all of the back end PHP scripts, in addition to updating the wiki with implementation changes.

Mike: He focused primarily on implementing front end features and integrating these features with the back end. In terms of integration, he primarily wrote the output that was to be received by the PHP scripts, and an Ajax interface to interact with the back end. In addition, in the

beginning, he got Incognito to interact with the CSE login authentication servers. Also, in the beginning, he helped with cookie management, and then passed on the task to Amanda, so he can work on the front end features of Incognito. These features include question and feedback submission and feed, and survey submissions, answering, and feed. In the interest of time, he also worked on getting multiple choices from the surveys in the PHP back end scripts. In terms of the unit test, he wrote the PHP unit tests for the survey submissions and answering. Along with this, he helped with testing and fixing bugs on both sides front end and back end.

Christine: Most of Chris' time was spent on designing and implementing the front end interface. Afterwards, Chris was in charge of the Student settings, Instructor settings, and timeline pages. In terms of integrating with the back end, she wrote the output to be received by PHP scripts and Ajax for the timeline. She wrote the Student and Instructor manual unit tests and helped in testing and fixing bugs for the front end.

Christopher: Early on in the project, he focused primarily on learning PHP, jQuery, and specifically how to use PHP to interface with MySQL databases, since he had no prior experience with these technologies. Once this technology barrier was overcome, he worked primarily with PHP for the feed's back end, and also wrote small amounts of Javascript for the auto-complete widgets and question/feedback submission. Between our Feature Complete Release and Release Candidate, he shifted his focus to writing PHPUnit tests for his back end code, and was also tasked with writing help and how-to pages integrated into Incognito itself.

How does this differ from your original expectations and specs?

It differs since originally Amanda thought she was going to be doing some development, however, this was not possible since there was a lot of work involved with being a PM that was not foreseen and also there needed to be someone to do overall quality assurance. Also for Beta release Christopher and Mike switched roles but then Christopher went back to front end development since Robert felt capable in handling all of back end. Christopher then moved on to work on a front end only feature.

Where did you spend too much time, and why?

Overall, we did not spend too much time on a particular feature or item as we were fully aware that we would fall behind. Our main risk that was assessed at the beginning of the quarter is that we would not be able to finish with the time and resources that we were appointed. One area where time was wasted would be with our System Architecture. At one point it was not being as helpful as intended and the team was a little confused on what to start on and how. Instead of pursuing further development, Amanda went in to talk to Professor Ernst about what was wrong and it became apparent that we did not produce a helpful architecture. Afterward this meeting, additional time was spent to refine and restructure our architecture which helped us in developing. From then on we have used our architecture to create deadlines and measure our progress.

Where did you spend too little time, and why?

We may have spent little time in building our testing structure during Beta Release and Feature Complete Release which made it difficult to track down exactly what functions were not working

when a bug was found. However, we made up for this during Release Candidate week. We realize that it would have been more helpful if we had them up earlier however it has been a great learning experience. For example, there were many times when a bug was found and we would realize that if unit tests were in place it would have been easier to identify what was wrong.