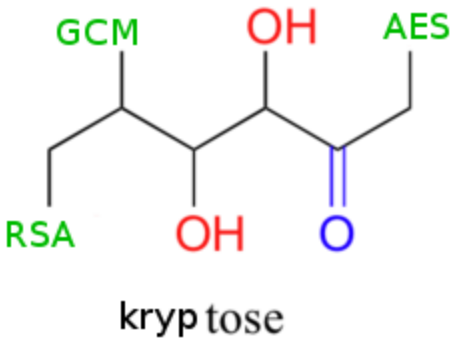
Kryptose™

Sprint Report: Final Release



Personnel: Jonathan Shi (js2845), Antonio Marcedone (am2623), Alexander Guziel (asg252), Jeff Tian (yt336)

Activity Breakdown

Jonathan:

I wrote much of the GUI, worked on revamping the MVC structure of the client, and did various debugging. I supported the team in making changes to the GUI. I made sure that passwords were destroyed from memory in the client. I changed the UserTable to use more standard concurrency style.

There was some refactoring that I did that was maybe not a good use of time, especially later on in the sprint period. Other than that, I feel the time was fairly productive and fun (or, productive in the context of the coursework anyway… in the context of my research not so much but hey it was fun and I like what we came up with). I think 45-50 hours spent on the project for this sprint.

Antonio:

For this Sprint, I focused mostly on testing and on the implementation of part of the GUI. Both the tasks were very useful for me, this being my first Java project ever. I learned the basics of how a GUI and event driven execution works, and benefited a lot from the guidance of my more experienced team mates. A lot of work was also devoted to bug fixing. Even though I was considerably slower than expected when working on the GUI (due to my lack of experience), I feel that I have been pretty efficient given my capabilities. I estimate around 30 hours of work for this sprint.

Alexander:

This sprint I spent a lot of time testing. I wrote tests for the server side as well as added server side functionality to change master passwords and delete accounts. I improved the functionality of the LogReader and helped fix other bugs. I also spent time deploying our

server to an AWS EC2 server, and getting it to work correctly with the client.I would say I was more efficient in my work this sprint than previous ones. I estimated 25 hours spent.

Jeff:

In this sprint I was, as in previous sprints, mainly working on client side things. Since I had build the previous command line interface and the MVC framework associated with it, I was responsible for helping to redesign the new MVC framework for the foundation for the new GUI. Aside from the core features we already had in the previous sprint, two key features introduced in this sprint was account deletion and changing the master password. I implemented the client-side logic for these features. I spent a large part of this sprint working to debug various GUI and other client-side problems, and worked to discover as many problems as I could through extensive testing of all of our features. I was also the main documentation writer for this sprint. I estimate about 25 hours spent on this sprint, I feel my time was used productively this time around.

Productivity Analysis

The Kryptose™ team productivity for this final sprint was better relative to the Beta sprint. Perhaps this is because our employees saw an end in sight, or perhaps it was because this sprint is worth significantly more than all the other ones gradewise, or maybe it was even because they felt a drive to work harder fueled solely by pure interest in learning.

In this sprint we stuck to our plan (formed at the end of the previous sprint) relatively well, as made noticeable strides to fix the problems we encountered in the previous sprint. Our members made good use of the branching feature in git, when there was a need to redesign part of the GUI one of our members made a separate branch and only merged back with master after his branch was tested and verified. We also did a better job of pushing only tested and functional code to the respository's main branch, in general we wrote a good deal of JUnit tests this sprint that caught a lot of our bugs.

Writing JUnit tests took less time than expected, testing always feels daunting going in but we've found that it is not so bad once you start. The process of writing and debugging the GUI definitely took more time than expected. Since our MVC code evolved in a messy way over the course of the previous two sprints, we took the liberty of redesigning our MVC framework, on top of writing the GUI from scratch (we had only a CLI the first two sprints). It turns out a lot of the things in Swing are pretty subtle (when textfields get cleared, which key presses trigger which buttons, etc) and we spent quite a while working out the various kinks in the system.

As a result of all the time spent debugging, we ran out of time to achieve some of our more reach goals, namely all the goals involving two factor or alternative authentication methods, as well as some smaller goals like automatic logging out of sessions after timeout.

There are no more future sprints as the course is ending, but the experience we've gained working in a group over the course of this semester over the three sprints we've had will definitely help us in any future software engineering pursuits we may have.