**Sprint Report 4 Document**

Data61

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**1. Sprint Planning Meeting –** 4/6/17

**1.1 Sprint Backlog**

User Story: Amazon Web Services: Adam / Mitch

* Estimated User Story points: 25
* Actual User Story points: 23

User Story: Javascript Coding: Tyler / Nick

* Estimated user Story points: 30
* Actual User Story points: 26

**2. Sprint Review Meeting –** 5/3/17

**2.1 Customer Demo**

Ran our final demo for sponsor. He was generally happy about our progress and expressed so.

**2.2 Stakeholder Involvement Review**

Over sprint 4, as well the entire semester, our sponsor has been only an email away. He answered all our questions no matter how complicated and met with us each week. He expressed what he wanted in a way each of us understood and made suggestions of how we could achieve each goal. His involvement in this project was key and without him our final prototype would be completely different from what it is now.

**2.3 Data Management Review**

So far this has not been an issue for our group.

**2.4 Requirements/User Story Review**

The requirements didn’t really change over the whole of sprint 4. We knew we had a limited time to finish and we focused on what was realistic to get done. Some of the coding aspects were difficult and there were times where we got stuck but, overall, things got done in a timely fashion.

**2.5 Progress Review**

This last sprint we were able to successfully move all our code from C# to JavaScript / Lambda. We were unable to move all functionality such as some conditionals and multiple page integration, but if there was another sprint after this one those would be top priority and would be relatively easy to finish up. Our final prototype is working.

**3. Sprint Retrospective Meeting –** 5/3/17

**3.1 Top Highlights**

* We managed to recreate all of code in a different language.
* We were able to get Amazon Web services to work with our project.
* Our entire group was able to understand and help out with our project.
* Code generating was successful!
  1. **Top Lowlights**
* Unable to get to multiple document integration.
* No testing as we moved platform and had limited time to create code.
* Most of the group had to learn a new language.

**3.3 Reflection on Improvements**

Group needs more documentation and needs to keep track of the time they put into the project instead of thinking back on it later still.

**4. (Include this section for your final sprint)**

**4.1 Recommendations for Future Projects**

* If you think of a problem, no matter how unlikely, make sure it is addressed properly. Lay out the project ahead of time and **plan it out properly.**
* Communicate with group members and sponsors as much as possible and make sure you all have similar understandings of user stories and the project over all.
* Documentation is a real thing and make sure that you fill it out completely and accurately.
* Track your progress! Write down what is being done, how long it takes, and how much got done. This will help others in the future as well as your group.

**4.2 Project Size and Effort Estimates**

**4.2.1 Size Estimates**

|  |  |  |
| --- | --- | --- |
| **Metric** | **Estimate** | **Actual Size** |
| SLOC | 2000 Lines | 2457 Lines |
| Classes | 12 Classes | 11 Classes |
| Modules | 3 Modules | 3 Modules |
| Help Document | 15 Pages | 25 Pages |
| User Story Points | 142 points | 172 points |

SLOC: Being within 25% of the actual number of lines of code wasn’t a terrible estimation. If we had to guess, we undershot it a little because of the change to AWS and JavaScript, which we weren’t as familiar with.

Classes: Estimation was about right

Modules: Estimated correctly

Help Document: The change to AWS was a huge proponent in the size increase of our document, hence us undershooting it quite a bit.

User Story Points: The switch over to JavaScript and AWS made us use more time than we had expected.

Overall, a lot of our underestimations can be explained with the change to an unfamiliar system, which made it harder to estimate.

**4.2.2 Effort Breakdown**

|  |  |
| --- | --- |
| **Project Area** | **% Effort** |
| Training | 10% |
| Requirements | 15% |
| Design | 10% |
| Coding | 40% |
| Testing | 15% |
| Mid-term and Final Reports | 10% |