SERP Group 9 - Retrospective Report 2

Meeting time: 6 pm 30th Aug 2020
Attendees: Basil, Daniel, Josh

The meeting was conducted on the 29th of August, 2 days after the client meeting. The main items of discussion were:

- Feedback from the client meeting relating primarily to user stories of future sprints.
- Planning and strategy for future sprints and the features that will be delivered iteratively.
- Discussing what technologies will be required to produce an effective cell simulation.
- The allocation of work and features for successful project management.

What went well:
One of the biggest achievements this sprint was tying up all the loose ends from the past sprint. Introducing advanced automated testing for the population functionality, as well as reintroducing susceptibility into the epidemic model. We incorporated all of this into our major 1.0 release, which is a big step forward in the development of the project.

Employing feedback on our use of user stories and documentation, we made strides in our project management ability. New user stories were recorded for every notable feature for this and the next sprint, with more still being developed for new features or issues that arise during development.

Our client communication was also a big focus for our group, made up of daily conversations with the client on slack as well as participating in multiple zoom meetings. This communication was essential in adapting to the change in the project goals, as it allowed us to readjust sprints and plans quickly.

What was lacking:
Through the retrospective meeting, the group did identify a number of elements that were lacking within our processes and future plans for the project. Firstly was the early planning and definition of user stories, which effectively held up the completion of development work, or at the very least, the appropriate recording of the progress that was, in fact, being made. Initially, most of the development work and tasks were defined as issues rather than specified as detailed user stories with complexity estimates, and associated epics. The issues were later transformed, assigning complexity estimates and re-distributing their assigned to group members appropriately, but ideally, this should happen as close to the start of the sprint as possible, or even beforehand.

Doing so would display a more accurate representation of the development effort overtime during the sprint and therefore result in better estimates for future work, and reliable completion of these tasks, rather than them just being ticked off at the end prior to the release.

The work effort throughout the sprint was quite bursty towards the end of the end, rather than evenly spread. However, this was partially due to the requirement of the time taken to

appropriately revise the issues, adapting them to user-stories, re-prioritising, and confirming them with the client. We acknowledge our process with user stories hass plenty of room for improvement, however, we note their use in this sprint was the first in the context of the project.

What did you learn:
Through this iteration, we learnt several things that we are going to bring with us as we continue to develop our project. The first thing that we have learnt from this iteration is about how we should approach our project. This means we need to treat our project in such a way that we work in a more vertically integrated manner, which will allow us to carry forward our work more easily between iterations where we can continue to develop and evolve. This is a better workflow that will allow the project to be broken down better which will help divide the work between each of us.

The second area that we have learnt about from this iteration is that of complexity estimates. As this iteration was the first iteration where we have made use of these complexity scores and we really did not have a great understanding of what each individual task was worth. From our client meeting, we had some comments on how we should utilise these scores. Therefore, hopefully, our estimates for the next iteration are more accurate. Review of our actual development effort relative to the complexity estimates appeared accurate, however, we do not currently have much of a reference point to compare against.

Finally, we spent a fair amount of time this iteration learning how to make use of the Zenhub workflow for the project charts such as our burndown chart and tracking of milestones. Along with that, we have learnt how to make better use of the project board, which will provide us with better management of our project.

What are you planning on doing in the next sprint:
A big feature that will change the way we work and communicate for the next sprint, is setting up a shared document between us and the client. Doing so will allow us to share user stories and sprint details with the client and receive feedback in a way that is instantly applicable. We plan to implement this in the first week of the sprint.

Another big component of the next sprint is detailing the software architecture that will underpin the logic of our cell simulations. Setting up the object-oriented structure for the cell population early will carry efficiency throughout this and future sprints. It will also allow us to document the feature requirements in the code itself for reference and clarity.

One process we will continue to improve upon in this sprint is the way we assign user stories and communicate them to the client. We are still figuring out appropriate time estimates for aspects of work, and we need to do a better job of assigning priority to each story based on the client's requirements.