## **Sprint Retrospective, Iteration # 4**

Context Project: Programming Life

Group: 101010

User Story #	Task #	Responsibl e for task	Task Assigned To	Estimated Effort per Task (in hours)	Actual Effort per Task (in hours)	Done (yes / no)	Notes
As a user, I want to be able to intuitively navigate the graph	Enable panning	Michael	Michael, Martijn	Michael=9 Martijn=6	Martijn=0 Michael=8	No	Currently, it is only possible to use movement keys to move the view of the graph. In the next sprint this will be finished with interactions where dragging events trigger movement.
	Enable zooming	Martijn	Martijn, Michael	Martijn=9 Michael=6	Martijn=6 Michael= 0	Yes	There is a very basic zooming functionality, which will be extended upon in next sprint, for a complete functionality at the end of the milestone.
As a user, I want to be able to quickly select my last used file when restarting the application	Remember last directory when choosing a file in the file selection screen	Martijn	Martijn	Martijn=2	Martijn=5	Yes	Took longer than expected, because there was some discussion about the way this should be done, but we managed to agree on a solution.

As a user, I want to be sure that I don't run into bugs	Test the draw methods	Martijn	Martijn	Martijn=8	Martijn=12	Yes	There were some issues with testing these methods with using Mockito, which cost some time. Also, restructuring the tests into a test folder was done here and improving NodeTest.
	Test the screen package	Michael	Michael	Michael=9	Michael=9	No	Testing with JavaFX elements caused issues. Solving these issues resulted in those classes having to be refactored. The main issue that caused this task to not be finished, is that this solution caused only 1 test class to compile instead of all classes.
The user wants a clear layout for the graphs that are displayed.	Create a layering algorithm which will determine the layout for subgraphs	Jochem	Jochem, Dex	Jochem=7. 5 Dex=7.5	Dex=8 Jochem=10	yes/no	There is a layering algorithm which assigns layers to nodes. However, these layers have to be optimized when we work on zooming.
	Node length based on segment length	Dex	Dex, Jochem	Dex=1 Jochem=1	Dex=2 Jochem=1	yes	The length of nodes is now based on the length of the represented sequence.

	A subgraph should be retrieved from the main graph which will be displayed.	Tycho	Dex, Tycho, Jochem	Dex=8.33 Tycho=8.3 3 Jochem=8.	Dex=9 Tycho=0 Jochem=4	yes	The data structure can now generate a list of nodes that need to be drawn based on a radius (amount of nodes) and a center node. However, this list is regenerated every time the subgraph changes, and will need to be adapted to accommodate for zooming and panning functionalities.
	Assign y coordinates to nodes so nodes in the same layer are not drawn on top of each other.	Jochem	Dex, Jochem	Dex=7.5 Jochem=7. 5	Dex=4 Jochem=2	yes	This is a very minimal solution, currently, because it will need to be adapted to minimize the amount of edges crossing one another in the coming sprint.
Improving caching	changing the cache to a serialization	Tycho	Tycho	Tycho = 6	Tycho=10	no	The heap size is too big to load the cache. We will probably not continue with this method.

## Main Problems Encountered

Problem: Due to Ascension day, we weren't able to meet on Thursday and Friday, which caused our communication to be worse than it should.

Reaction: We made clear agreements before the free days on what should be done at what moment and we made sure to stay available to be contacted regarding the project, so we still could communicate. The amount of communication in those 2 days still was a bit lacking.

## Adjustments for the next Sprint

We are planning to improve our estimations, but we have no real plan on how to do this. It will also be harder as next milestone takes 2 sprints. We will do this by making a planning for 2 weeks and dividing the issues.

For communication, we want to improve our communication between our meetings by keeping track of what others are doing even between the meetings.