Sprint Retrospective 7

User Story	Task	Task Assigned To	Estimated Effort per Task *(in hours)*	Actual effort per task *(in hours)*	Done	Notes
As a user I want to be able to see the strands when zoomed in and mutations when less zoomed in	Make algorithm to recognize mutations (SNP, duplications)	Jeffrey	10	13	Yes	
	Make algorithm to recognize	Jeffrey	10	0	No	Abeel indicated that this feature was unnecessary, during the meeting

	mutations (inversions)					
	Visualize mutation in an intuitive way	Jeffrey	5	8	Yes	Not completely finished, mutations only show on labels.
As a user I want the program to be fast, even with large datasets	Get the Spring framework up and running	Youp	8	15	Yes	Changed to Neo4j OGM, which was unplanned and therefore took more time
	Change constructors from database	Youp	4	6	Yes	
	Finish coupling to database	Youp	4	10	No	Turned out to be non-trivial and include refactors

	Implement caching algorithm	Youp	12	2	No	Other tasks were too demanding
As a user I want a user-friendly program	Make zooming view draggable	Thomas	6	0	No	Phylogenetic tree turned out to be time-consuming
As a user I want to navigate and select genomes from the Phylogenetic tree in an easy way	Visualize the phylogenetic tree	Thomas	8	8	Yes	Switched to radial instead of linear view
	Collapse the phylogenetic	Thomas	8	8	Yes	

	tree and give a heatmap						
	Make the phyogenetic tree user-friendly	Thomas	4		2	No	Still improvements to be done.
As a user, I want a cleanly visualized graph	Refine bubble-collapsing algorithm	Matthijs	8		10	Yes	Algorithm was easy, but optimizing turned out to be time-consuming due to memory constraints
	Fine tune y-coordinates	Matthijs	5		6	Yes	Y coordinates now based on genome.
As a user I want to visualize the semantic	Labels should be different based on zoom level	Matthijs	4		0	No	Mutations did not work as expected, so was unable to implement.

context of the zooming level						
	Visual information should be different based on zoom level	Matthijs	3	0	No	See above
	Implement annotations	Kasper	20	35	Yes	More refactoring was needed than expected
	Create a bookmark system	Kasper	4	0	No	

Main Problems Encountered

Problem 1

Description: The framework used for automatic mapping to object was a major hurdle again, also resulting in a switch from Spring to Neo4J OGM.

Reaction: Luckily, the framework is working at the moment and although difficulties persist, it is usable. Some refactoring of our original code is still needed though.

Problem 2

Description: The mutations algorithm did not work.
Reaction: Work on the frontend for mustations was postponed to next week.

Problem 3

Description: We found out our code was not that well-structured at all places, resulting in us choosing to refactor instead of focus on features (in order to make the app future proof).

Reaction: Factories were created for multiple classes, along with other improvements.

Problem 4

Description: Mayor merges were made on thursday evening, which resulted in a lot of last minute work, and lower code quality than wanted.
Reaction: Working through thursday night.

Adjustments for the next Sprint

No more large integrations on thursday evening.

Avoid getting into technical debt.

Since mutations should be working this sprint, these problems should be solved.