## TI2806 Contextproject

## EWI/EEMCS Sprint Reflection 2

Programming Life Group 4

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**Note:** During the sprint we have made some changes to our original sprint plan, as a result of switching of external libraries. In order to accommodate to these changes, many tasks that were originally in the sprint plan were pushed back or not done at all.

Sprint Reflection #2.1							
Programming Life 4							
User story	Task	Task assigned to	Estimated number of hours	Actual effort	Priority (scale 1-5; low to high)	Done	Notes
As a user, I want to be able to layout large files, without using a force directed layout.	Research Neo4j	Gerlof	6	10	5	Yes	Neo4j seems to be more capable of handling the scale of our dataset. Traversal descriptions make handling large dataset much easier.
	Implement a Neo4j backend	Gerlof & Skip	10	20	5	Yes	
	Implement a topological order	Gerlof & Skip	6	8	5	Yes	
	Implement single-source longest path algorithm	Gerlof & Skip	2	4	5	Yes	
As a user, I want an uncluttered (no conflicting colors), logically arranged graphical interface.	Create mockups of the end product, including all widgets and features with their details.	Owen & Jente	10	11	5	Yes	
	Reimplement last week's GUI in JavaFX	Jente	5	10	5	Yes	
	Partially implement the mockups in JavaFX	Jente	2	2	3	Yes	
	Connect GUI with Neo4j backend	Jente, Piet, Gerlof & Skip	20	30	4	No	While there is a basic viewer now, a lot of functionality will still be added.
	Define color palette for nodes and edges.	Owen & Piet	5	2,5	2	No	Research has been done. Not fully decided what to use the color encoding for, so picking a definitive palette will be postponed.
As a user, I want to be able to see the DNA sequences in an alignment graph.	Implement a topologically sorted layout.	Gerlof & Skip	12	20	5	No	Topological sorting and drawing has been implemented, but we are not fully satisfied with the result yet.
As a user, I want to be able to interact with the graph to obtain different information about genome samples.	Define different zoom levels.	Gerlof & Skip	1,5	2,5	4	Yes	Also see mockups.
Main problems encountered							
Problem 1:	Swtiching graph library						
Description	During the customer meeting last friday we got negative feedback about our choice of visualizing the graph. Our approach was focused on using force directed layouts with GraphStream. We tried to get a topological layout in GraphStream, however this was not very efficient.						
	Because GraphStream focuses on dynamic graphs and force based layouts, it was not the right choice after this feedback anymore.						
Reaction	Switch to Neo4j graph database and create an implementation for layout ourselves.	1					
Problem 2:	Switching GUI library As a result of switching from GraphStream to Neo4j, there was						
Description	no good reason to keep using Swing. Since it is rather old, the options for customizing the GUI were also limited.						
Reaction	Switch to the JavaFX libary and redo the GUI with the help of the mockups.						
Problem 3:	Too little time for creating our sprint plan after customer meeting						
Description	After the customer feedback we looked for opportunities for realizing a layout in graphstream. However we needed more time to realize this was not feasible.						
Reaction	Actively diverge from the sprint plan						
Adjustments for next sprint plan							
Catch up with what was originally planned for this week.							