

User Story	GitHub issue number	End-responsible	Task	Assignees	Estimated effort (hours)	Actual effort (hours)	Done	Notes
As a user, I want to be able to render large graphs	#392	Casper	Fix Tomato rendering (fix large graph filecache)	Casper	8	7	yes	
As a user, I want to be able to greatly zoom out	#423	Joël	Fix center point queries with range >= 500	Joël	11	5	yes	This issue was fixed by Felix whilst working on the data structure, so I had to spend little time on this.
Coordinate system	#322	Georgios	Finish and PR genome indexing into master	Georgios	1	4	yes	
			Finish querying	Georgios	7	0	no	Not worked on, due to other priorities
			Test and optimize properly	Georgios	3	2	no	Explored different file reading optimizations, still needs work
			Integrate with UI (show in metadata, navigate)	Georgios	6	6	no	Done, but not yet reviewed (also requires further optimization for smooth use)
			Integrate with bookmarks	Georgios	3	0	no	Not worked on, due to other priorities
Fix FAFOSP-Y, no overlapping edges!	#417	Felix	Come up with an improved algorithm	Felix	13	10	yes	
			Implement crossing edge reduce algorithm	Casper	-	4	yes	We put some extra resources on this during the week, so this task is new
			Implement improved algorithm	Felix	7	13	no	We worked on quite a bit already, but do need to improve it further
Dynamic FAFOSP	#305	Felix	Dynamic layout calculation	Felix	8	10	yes	
As a user, I want to be able to easily see the sequences belonging to nodes	#410	Casper	Sequence text area	Casper	2	4	yes	Done by Joel. Spent some extra time to add additional features for quality of life.
			Display sequence text in nodes	Niels	8	8	yes	
Eagerly cache node metadata	#317	Casper	Pre-load sequences of nodes in viewport	Casper	13	13	yes	
GZip	#214	Joël	Read GZIP files	Joël	4	2	~	Done by Casper. Built a prototype implementation, but did not turn out to be feasible due to not completely valid provided gzip files and performance reasons
Console Improvement	#403	Niels	Change to RichFxFText to allow color, selection and improved memory footprint refactor code for allow improved testability.	Niels	10	7	no	Good progress on implementation but has to be merged
		Niels	Allow scalability of viewport	Niels	3	3	no	Implemented but not yet merged
		Niels	Add additional tests	Niels	4	1	no	
Progress Bar	#408	Casper	Improve progress bar for whole parsing pipeline	Casper	5	5	yes	
Zooming radius +/- N (max 10k)	#412	Joël	Use centerpoint query class	Joël	2	5	yes	Due to technical debt, this required a significant refactor of the graph visualisation classes.
			Add +/- buttons for zooming	Joël	2	1	yes	
			Zoom at cursor position	Joël	3	3	no	It is not smooth enough yet.
Panning	#421	Joël	Use centerpoint query class	Joël	2	5	yes	Due to technical debt, this required a significant refactor of the graph visualisation classes.
			Making it more smooth	Joël	4	5	yes	
Edge thickness on weight attribute	#391	Georgios	Explore computation possibilities of doing this	Georgios	5	2	no	
			Implement this computation	Georgios	3	0	no	
As a user I want to be able to zoom out and not only see edges	#393	Niels	Edge alpha on zoom level	Niels	3	4	yes	

Problems								
Graph Layout								
Description	There were significant problems with our graphing layout algorithm, which (again) could not be completed within this sprint. This was due to a combination of premature optimization, poor abstraction, and under-estimation of workload.							
Reaction	We put more time into this than expected, but this had to come at the cost of other tasks of the sprint.							
Midterm of Course								
Description	The other course of this quarter had a midterm this week, which took a chunk of our development time.							
Reaction	We expected this to happen, but we did not completely plan for it accordingly. We should've taken it into our consideration in the initial planning of the week.							
Improvements for next sprint								
- Assign more people and more time to the graphing layout algorithm (making this one the highest priority for this sprint)								
- More intermediate updates on progress and more cooperation between people responsible for different features								