

User story	Task	Assignee	Estimated effort (hours)	Actual effort (hours)	Done (Yes/No/Partly)	Notes
As a developer, I want to get an accurate analysis of my code	#65 Exclude 3rd party code from analysis tools	Wouter	1.0	1.0	Yes	
	#62 Let PMD errors be equally generated by the build and the site	Wouter	3.0	0.0	No	
	#53 All Site reports should be both aggregate and per-module	Wouter	3.0	0.0	No	Was impossible, because JaCoCo doesn't support this.
As a developer, I want to work with maintainable code	#83 Refactor Model Class structure to correct inheritance and loosely coupled design patterns	Wouter	9.0	20.0	Yes	Also included creating more optimal memory usage, which was effective but cost more time.
As a user, I want to zoom intuitively	Add (semantic) zooming through scrolling	Casper en Faris	6.0	-	No	Merging the bubbling algorithm took more time to merge than expected.
As a user I want to have semantically grouped data for easy grouping	Create an algorithm to filter straight sequences into a bubble	Cas	4.0	4.0	Partly	The algorithms were finished, but they were not integrated into bubbles in the graph
	Create an algorithm to filter snips into a bubble	Cas	6.0	6.0	Partly	The algorithms were finished, but they were not integrated into bubbles in the graph
	Create an algorithm to filter indels into a bubble	Cas	6.0	6.0	Partly	The algorithms were finished, but they were not integrated into bubbles in the graph
	#109 Finish the algorithm to make bubbles based on the phylogenetic tree	Casper	8.0	20.0	Partly	The phylogenetic bubbles work (mostly) correctly, but are not integrated into the application
As a user I want to have more metadata attached to the phylogenetic tree and graph to derive the types of genomes from.	Use the lineage color to represent the types of genomes in the phylogenetic tree.	Faris	3.0	3.0	Yes	
	Create multiple heatmaps using the metadata file	Casper	8.0	0.0	No	Bubbles had more problems than expected
	#110 Parse annotations for phylo tree	Justin	6.0	6.0	Yes	
	Add annotations to the nodes in the phylo tree	Justin	4.0	2.0 (justin), 2.5 (faris)	Yes	
	Make clear what the user is seeing in the phylo tree by adding a legend (or something else)	Justin	6.0	2.0	No	Some wip in code, but nothing to show.
As a user I want to be able to select any node in the phylogenetic tree and draw it in a graph.	Add drag and drop to the phylogenetic tree nodes. If a tree node is dragged on top of a graph, the user should get a list of possible actions:	Faris	3.0	3.0	Yes	
	add to drawn graph	Faris	2.5	1.5	Yes	
	clear old graph and draw in graph	Faris	2.0	1.5	Yes	
	create and add to new graph	Faris	2.5	1.5	Yes	
	Create a layout (visual representation) for the points mentioned above	Faris	2.0	3.0	Yes	

As a user I want to have elaborate statistical data to use while browsing the genomes.	Add heatmaps/annotations on Bubbles with relevant information about the bubbled structure	Casper	3.0		No	Bubbles took more time
	Add legend in the graph view to explain the annotations on the bubbles	Casper en Faris	2.0	-	No	Bubbles aren't yet completed, so could start on this yet.
As a user I want to see a top level overview of the graph	Create top level overview with only edges (no nodes). When zoomed out, if the bubbles/nodes have a size below a certain treshold, show only the edges.	Faris	2.0	-	No	Zooming is not yet implemented, so couldn't start on this yet.
	Create a minimap indicating where in the graph you are	Wouter	7.0	0.0	No	This was pushed down because of the memory improvement
As a user I want to be able to open any gfa and nwk file	Create option to load file	Justin	6.0	6.0	Yes	
As a user I want to be able to compare two graphs	Work on the comparison between two bubbled graphs	Cas	7.0	0.0	No	
As a client, I want a good presentation and demo to bring me up to date on the progress	Create a presentation	Wouter	2.0	2.0	Yes	

Main Problems Encountered

Adjustments for the next Sprint

		1. Allocate significantly more time to semantic bubbling				
Problem 1	Semantic non-triviality	2. Finish the tasks in the sprint plan before doing anything else.				
Description:	Too little time was allocated to design and implementation of semantic grouping and zooming. The semantic grouping was not finished completely for that reason.	3. Less time on code quality and more time on features				
Reaction:	Lower priority tasks were pushed down in favour of more time on bubbles.					
		Motivate any adjustments that will be made for the next Sprint.				
Problem 2	Priorities were not adhered to	1. This must have is really important and the only thing limiting our application.				
Description:	While priorities and tasks were assigned and created at the start of the sprint, we got too distracted optimizing other parts of the code, we forgot our acutal priorities. This led to unfinished tasks and missing 'must have' requirements (semantic zooming)	2. Really following the sprint plan and finishing will make our sprint burndowns more efficient. Although we love to work on the codebase, we must not let our determination and love for perfection get the best of us for unimportant parts of the application.				
Reaction:	We now have a greatly optimized application, which we spend significant time on. This time should have been spent on other tasks, which don't get their hours written in the retrospective.	3. While this is an uncommon statement to make, we spent too much time optimizing, reviewing and improving our code. Instead, we should have implemented the functionality that the client desires and needs.				