| User story  | Task   | Groupmember responsible | Assignee        | Estimated effort (hours) | Priority (1<br>low - 5 high) |
|---|--|-------------------------|-----------------|--------------------------|------------------------------|
| As a developer, I want to get an accurate analysis of my code   | #65 Exclude 3rd party code from analysis tools   | Wouter                  | Wouter          | 1.0                      | 1                            |
|   | #62 Let PMD errors be equally generated by the build and the site  | Wouter                  | Wouter          | 3.0                      | 3                            |
|   | #53 All Site reports should be both aggregate and per-module   | Wouter                  | Wouter          | 3.0                      | 4                            |
| As a developer, I want to work with maintainable code   | #83 Refactor Model Class structure to correct inheritance and loosely coupled design patterns  | Wouter                  | Wouter          | 9.0                      | 5                            |
| As a user, I want to zoom intuitively   | Add (semantic) zooming through scrolling   | Faris                   | Casper en Faris | 6.0                      | 5                            |
| As a user I want to have semantically grouped data for easy grouping  | Create an algorithm to filter straight sequences into a bubble   | Cas                     | Cas             | 4.0                      | 4                            |
|   | Create an algorithm to filter snips into a bubble  | Cas                     | Cas             | 6.0                      | 3                            |
|   | Create an algorithm to filter indels into a bubble   | Cas                     | Cas             | 6.0                      | 3                            |
|   | #109 Finish the algorithm to make bubbles based on the phylogenetic tree   | Casper                  | Casper          | 8.0                      | 5                            |
| 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                   | Faris           | 3.0                      | 3                            |
|   | Create multiple heatmaps using the metadata file   | Casper                  | Casper          | 8.0                      | 2                            |
|   | #110 Parse annotations for phylo tree  | Justin                  | Justin          | 6.0                      | 5                            |
|   | Add annotations to the nodes in the phylo tree   | Justin                  | Justin          | 4.0                      | 3                            |
|   | Make clear what the user is seeing in the phylo tree by adding a legend (or something else)  | Justin                  | Justin          | 6.0                      | 4                            |
| 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                   | Faris           | 3.0                      | 4                            |
|   | add to drawn graph   | Faris                   | Faris           | 2.5                      | 4                            |
|   | clear old graph and draw in graph  | Faris                   | Faris           | 2.0                      | 4                            |
|   | create and add to new graph  | Faris                   | Faris           | 2.5                      | 4                            |
|   | Create a layout (visual representation) for the points mentioned above   | Faris                   | Faris           | 2.0                      | 4                            |

| 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 | Casper          | 3.0 | 2 |
|---|--|--------|-----------------|-----|---|
|   | Add legend in the graph view to explain the annotations on the bubbles   | Faris  | Casper en Faris | 2.0 | 2 |
| 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  | Faris           | 2.0 | 2 |
|   | Create a minimap indicating where in the graph you are   | Faris  | Wouter          | 7.0 | 1 |
| As a user I want to be able to open any gfa and nwk file                                | Create option to load file   | Justin | Justin          | 6.0 | 3 |
| As a user I want to be able to compare two graphs                                       | Work on the comparison between two bubbled graphs  | Cas    | Cas             | 7.0 | 3 |
| As a client, I want a good presentation and demo to bring me up to date on the progress | Create a presentation  | Wouter | Wouter          | 2.0 | 5 |