

Sprint Retrospective, Iteration #2

Context Project: Programming Life

Group: Byzantine Generals (PL1)

User Story	Task	Task Assigned To	Esmitated Effort per Task (in man-hours)	Actual Effort per Task (in man-hours)	Done (yes/no)	Notes
As a DNA researcher, I want to view and explore a phylogenetic tree So that the relatedness of samples can be researc	Show phylogenetic tree in the client	Kamran Tadzjibov	10	12	yes	Done but not fully streamlined in website
	Parse and construct phylogenetic tree information	Ravi Shivam Auta	8	10	yes	
	Add phylogenetic tree to API	Adam el Khalki	4	4	yes	
As a DNA researcher, I want to have semantic zooming So that the information displayed is always relevan	Correctly position nodes in graph	Kamran & Ravi	20	18	yes	Went through lots of prototypes.
	Create hierarchical bubbles from nodes	Adam & Ali	24	26	yes	Done but terribly inefficient. Different method will be used to aggregate graph (based on phylogenetic tree)
	Visually distinguish mutations	Samuel D. Sital	16	12	no	Depended on hierarchical bubbles, so its workings are not fully tested
As a client, I want to have the webapp on the web So that I can easily run the webapp and give feedb	Set up server on the web	Ali Smesseim	6	6	yes	

Main Problems Encountered

Problem 1						
Description:	The creation of hierarchical bubbles turned out to be terribly inefficient. The algorithm is only $O(n^2)$ but it creates lots of objects, which leads to an OutOfMemoryException.					
Reaction:	Base bubble aggregation on the phylogenetic tree. Also, performance of the algorithm that constructs these bubbles has to be investigated before implementation.					