

Requirements and User Stories

Higher level user stories - these will be the kinds of stories we would ideally walk through at the end of the project.

More specific tasks and their corresponding story points can be found in Trello.

ID	User (s)	Story Description	Current Status	Task Size	Trello Label
1	Students	As a student, I want to be able to see a visualisation of each of the steps of an algorithm so that I can understand how each of the steps manipulates the data that the algorithm is working on.	<i>Quicksort</i> The visualisation is wrong - using a Tree algorithm implies a sort of 'mergesort' function. Instead we should use more of a bar chart structure, with highlighting /shading to show which part of the data is currently being worked on. <i>Heapsort</i> The visualisation for heapsort is somewhat satisfactory. The client isn't entirely happy with the look of the tree, they would like it to spread out more horizontally and use tweening if possible.	<i>Quicksort</i> Large <i>Heapsort</i> Small	USER STORY 1
2	Students	As a student, I want to be able to view the pseudocode and it's corresponding visualisation for an algorithm in varying levels of detail so that I can first establish a big-picture context for a step before looking at the finer detail.	<i>Quicksort</i> The pseudocode is currently working correctly in its's ability to be collapsed and expanded into less detailed and more detailed chunks respectively. However, considering User Story 1, and the fact that the visualisation of the quicksort algorithm needs to be entirely rethought, so too does the step-wise refinement of the visualisation for quicksort. <i>Heapsort</i> The pseudocode is currently working correctly in it's ability to be collapsed and expanded into less detailed and more detailed chunks respectively. However, the visualisation of the algorithm is always showing the most detailed steps, irrespective of the level at which the pseudocode is collapsed. We need to identify why this is occurring and rectify this so that the detail showed in the animation corresponds to the amount of detail currently shown in the pseudocode.	<i>Quicksort</i> Large <i>Heapsort</i> Medium	USER STORY 2
3	Students	As a student, I want to be able to see what each of the variables are standing for at any given time throughout the execution of the algorithm, so that I can easily follow the progress of the code.	<i>Quicksort</i> Variable pointers for left, right, i and j need to be added. <i>Heapsort</i> Variable pointer for i,j,k required.	<i>Quicksort</i> Medium <i>Heapsort</i> Medium	USER STORY 3
4	Teacher	As a teacher, I would like to be able to add additional algorithms to the program so that I can use the framework to teach other algorithms to my students.	There is currently a user guide on how the add algorithms to the program. Depending on the nature of the changes we make to the program, this user guide may need to be adjusted.	Small	USER STORY 4