## **User Stories**

1 story point = half an hour of work

Complete Incomplete

## general

ID	User	Story	Story Point Estimate
01	Students	We want to see the visualization of the graph at the entry of the AIA home page. (Remove the 'Build Graph' button)	4
02	Students	We want to see the visualizing level varying with the expansion and collapse of the code.	15
03	Students	We want to visualize the code in detail. Animations are supposed to show pointers, or in some cases in other ways.	15
04	Students	We want the animation and pseudocode to be synchronized.	10
05	Students	We want the animation to be clear enough so that we can understand the algorithms with less effort.	8
06	Students	We want to see fewer textual instructions, the interface should be mostly self-explanatory. (less is more)	10
07	Students	We want to enter the site and start inspecting right away without any excess clicking. (Reverse the code tab and the background tab)	2
08	Students	We expect that some messages and interactive processes can be more reasonable and self-explanatory.	4
09	Students	We want the Play/Step control on the left, next to the speed control, and the progress strip on the very right.	3
10	Students	We want the default size of the visualization to be optimal (not much whitespace and show all the important elements)	2
11	Students	We want to see the matrix index, array, node index start with 1, not 0.	2
12	Students	We want to well document the unsolved feature like tuning. with the ideal realization prototype or example.	8
13	Students	We want to see the explanation in a small section of the screen rather than a pop-up window.	4

## Prim's

ID	User	Story	Story Point Estimate
14	Students	We want to see how priority queue manipulate (init, change)	15
15	Students	We want to see the cost array, the parent node.	20
16	Students	We want to see the priority queue list element in pair (node and priority)	8
17	Students	We want to drag the widgets of the graph and keep the shape unchanged even going back to the last state. (Optional)	10
26	Students	We want to see which edge and node are updating in each step.	10

## Transitive Closure

ID	User	Story	Story Point Estimate
18	Students	We want to see 2 different direct edges between 2 nodes separately, not an edge with 2 arrows.	8
20	Students	We want to see the matrix with node index both horizontally and vertically.	3
21	Students	We want to have one expansion/collapse button for the inner loop to view code at different levels. (The visualization has to be adapted to that variation at the same time)	20
22	Students	It would be better if there is an introduction showing how Warshall's algorithm be optimized from a naive version. (Optional)	10
23	Students	We want to drag the widgets of the graph and keep the shape unchanged even going back to the last state. (Optional)	10
24	Students	We want to see cells in the transitive closure highlighted with different colours and move along columns and rows.	15
25	Students	We want to see pointers to be shown in the graph. (low priority)	8
26	Students	We want to see the highlighted cell moves clean and quickly, without redundant clicks. Also the i, j pointers should not disappear unreasonably.	10
27	Students	We want to see the value of k in a text area.	2