User story / task	Cost estimation	
	Story points	Ideal days
As a researcher, I need to programmatically modify and query the data, so that I can run simulations and perform data analysis.	40	4.0
As the port authority, I want to create & edit a custom port layout to use the application with, so that I can use it for my own port	13	1.3
As the port authority, I want to detect congestion, so that the solution doesn't cause ships to collide when leaving/entering the port.	?	?
As a researcher, I need the operators to record the reasons for change, so that I can analyse the reasons for inefficiency.	?	?
As a researcher, I need the app to be free and open-source, so that I can modify and improve it	1	0.1
As a vessel planner, I want to be able to see a schedule visualisation as a time-key graph, because it is easier to follow naturally.	30	3.0
As a researcher, I need to programmatically modify and query the data, so that I can run simulations and perform data analysis.	40	4.0
As a terminal manager, I want to create a report of the solution so that I have a detailed description of the schedule.	?	?
As a port manager, I want to accept the schedule, so that it can be sent to the port authority.	?	?
As a port manager, I want to reject the schedule, so that it can be returned to planner.	?	?
As the port authority, I want to edit the port layout of the application, so that small changes in the port are easy to adapt to.	5	0.5
As the port authority, I want to detect congestion, so that the solution doesn't cause ships to collide when leaving/entering the port.	?	?
As a researcher, I need the operators to record the reasons for change, so that I can analyse the reasons for inefficiency.	?	?
As a researcher, I need the app to be free and open-source, so that I can modify and improve it	1	0.1
As a researcher, I need the app to be open-source, so that I can modify it and improve it.	1	0.1
As a vessel planner, I want to be able to see a schedule visualisation as a time-key graph, because it is easier to follow naturally.	30	3.0
As a vessel planner, I want to modify the schedule by filling in a form, so that I can be precise with my modification.	3	0.3
As a vessel planner, I want to drag and drop vessels to modify a schedule, so that I can easily change the scheduling of vessels.	20	2.0
As a vessel planner, I want to detect infeasibilities, so that I can be sure to deliver a feasible schedule.	13	1.3
As a vessel planner, I want to create vessel information, so that I can easily update the database if a new vessel is in the port.	2	0.2
As a vessel planner, I want to be able to preview changes before committing to them, so that I don't accidentally ruin the schedule.	5	0.5
As a vessel planner, I want to modify vessel information, so that I can adapt the scenario to changing real-life conditions.	3	0.3
As a vessel planner, I want to undo recent scheduling changes, so that I can go back to the old solution if the scheduling change makes it infeasible (or for some other reason)	13	1.3
As a vessel planner, I want to redo the scheduling changes, so that I can easily compare the two solutions.	13	1.3
As the port authority, I want to create & edit a custom port layout to use the application with, so that I can use it for my own port	13	1.3
As a terminal manager, I want to create a PDF version of the solution so that I can easily store and share the report to other parties.	8	0.8
As a port manager, I want to be able to see certain performance metrics (which?) of the solution, so that I can see how good of a solution the P created.	8	0.8
As the port authority, I want to detect congestion, so that the solution doesn't cause ships to collide when leaving/entering the port.	?	?
As the port authority, I want to see the performance metric of the port, so that I can see how well the system is doing.	8	0.8
As a vessel planner, I want to generate a feasible solution if the current solution is not feasible, so that I can deliver a feasible schedule.	100	10.0
As a researcher, I want to use my own scheduling algorithm in the application, so that I can evaluate its performance by the performance metrics of the app.	0.5	0.1
As a terminal manager, I want to see a list of changes to the schedule, with the author of the change and the possibility of a reason being specified, so that I can understand why the vessel planners made that change.	20	2.0
As the port authority, I want everybody to be authenticated before they can use the system, so that I can limit who can see and manage what.	40	4.0