

Date	Action	Details	Comments/ Follow up	Date completed	Criterion
August 2015	Informal talk with client	The client commented on his problem and I became intrigued with it.	I began reading about possible solutions, and gradually became more interested in the problem.	21 August	A
August 2015	Consultation with Computer Science teacher	The project was deemed viable by the teacher		26 August	A
August 2015	Formal consultation with client	The possible solution was discussed as well as success criteria outlined	Begin research on ant foraging. Processing was determined as the software to be used.	27 August	A
September 2015	Second consultation with client	Success criteria were prioritized and clearly determined	Research into Processing GUI libraries	3 September	A
September 2015	Third consultation with client	The mockup and outline of the program was shown and discussed with client.	It was rather rudimentary and drawn on paper, I'd need to digitize it in some way.	10 September	B
September 2015	Define project schedule	Deadlines and further consultation meetings were agreed	We agreed that we would meet each time after a milestone in the product was reached.	14 September	B
September 2015	Begin product design	Began the definition of the classes to be used and outline of algorithms required using UML and class diagrams.		16 September	B,C

October 2015	Begin product development	Using the acquired knowledge about libraries and ant foraging, the algorithmic base of the product begins		15 October	C
October 2015	First milestone meeting & testing	I test the modeling functionality of the product, in consultation with the client	The performance of the program was slow.	15 October	C,D
October 2015	Second development phase	Revise product using input from client, and begin visualizing part of the product, along with its graphical interface.	Fixed the algorithm that generated the weighted random distribution for better performance and lower memory usage	16 October	C
October 2015	Updated UML diagrams	The UML diagrams were updated in order to reflect the major changes in the code.		16 October	B
November 2015	Second milestone meeting	The UI was shown to the client and suggestions made.	Client suggested using transparency to visualize pheromones as well.	30 October	C,D
November 2015	Suggestions implemented	By directly modifying the alpha value of the colors and adjusting the alpha scale to the maximum levels.		2 November	C

November 2015	Fine tuning	Some heuristic parameters and details about the mathematical models of the simulation were changed, inspired by the paper “Ant Foraging Revisited” by Sean Luke	The mathematical model used for pheromone deposition, as well as the parameters for ant life, diffusion and evaporation rate as well as the exponent for the weight of the random distribution were used as starting points for my program.	3 November	
November 2015	Testing	The simulation was left running for a long period of time (3 hours), in order to detect possible concurrency errors.	I fixed a problem that arose from the way Java handles iterating data structures and caused random crashes.	4 November	C
November 2015	Teacher consultation	A final consultation was carried out with the teacher, for some final notes.		5 November	A,E
November 2015	Teacher's suggestions along with refinement of secondary goals considered as possible future improvements.			7 November	D,E