)	0	Task Mode	Task Name		Duration	Start	Finish	Predecessors	Resource Names
1		*	Project start		0 days	Mon 27/07/15	Mon 27/07/15	5	
2		5	Planning		7 days	Mon 27/07/15	Mon 3/08/15		
3	•	-5	Requirements elicitation		2 days	Mon 27/07/15	Tue 28/07/15	1	Everyone
4		-5	Brainstorm design options		1 day	Wed 29/07/15	Wed 29/07/15	5 3	Everyone
5	•	-3	Design tradeoff analysis		2 days	Thu 30/07/15	Fri 31/07/15	4	Everyone
6		-5	Elaborate design details		2 days	Sat 1/08/15	Sun 2/08/15	5	Everyone
7		-5	Documentation		7 days	Mon 27/07/15	Sun 2/08/15	3SS,6FF	Chang Kon,Elliot,N
8		*	Plan due		0 days	Mon 3/08/15	Mon 3/08/15	6,7	
9		-	Implement robot nodes		8 days?	Mon 3/08/15	Mon 10/08/1	5	
10	•	-5	Design parent robot class		1 day	Mon 3/08/15	Mon 3/08/15	6,7	Chang Kon, Guyve
11	Ť	-5	Implement child classes for and carrier robot	picker	1 day	Tue 4/08/15	Tue 4/08/15	10	Chang Kon,Guyver,John,
12		-9	Implement robot behaviors	5	4 days?	Wed 5/08/15	Sat 8/08/15		
13	•	-9	Picker robot movement a rows in orchard	round	1 day?	Wed 5/08/15	Wed 5/08/15	11	Chang Kon,Guyver
						T	n		
			Task			Inactive Summary	U	External Tasks	♦
			Split			Manual Task		External Milestone	↓
-		6gantt (1)	Milestone			Duration-only		Deadline	
Date: Thu 6/08/15			Summary Project Summary	1		Manual Summary Rollup		Progress Manual Progress	
			Project Summary	И	U	Manual Summary		Manual Progress	
			Inactive Task Inactive Milestone			Start-only]		
			inactive willestone			Finish-only	-		

)	0	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names
14	Ť	-5	Carrier robot movement to and from bins	1 day?	Wed 5/08/15	Wed 5/08/15	11	John,Nikhil
15	Ť	-5	Robot detection of static objects in front	1 day	Wed 5/08/15	Wed 5/08/15	11	Chang Kon,Guyver,John,
16	•	-5	Robots stop moving or spin on the spot if obstacles are detected in front	2 days	Thu 6/08/15	Fri 7/08/15	15,14	Chang Kon,Guyver,John,
17	•	-	Dynamic obstacle detection (e.g. people and animals) in front	1 day	Sat 8/08/15	Sat 8/08/15	16	Chang Kon,Guyver,John,
18	Ť	-5	Unit/acceptance testing	1 day?	Sun 9/08/15	Sun 9/08/15	17	Everyone
19	•	-5	Documentation	7 days	Mon 3/08/15	Sun 9/08/15	10SS,18FF	Chang Kon, Guyve
20		*	Robot nodes and environment complete	1 day?	Mon 10/08/15	Mon 10/08/15	18,19,27,28	
21		-5	Simulate environment	7 days?	Mon 3/08/15	Sun 9/08/15		
22	Ť	-5	Create a static bitmap for the orchard	d 2 days	Mon 3/08/15	Tue 4/08/15	6,7	Elliot,Lennon,Pau
23	•	-5	Create a class for person	3 days	Wed 5/08/15	Fri 7/08/15	22	Elliot,Lennon,Pau
24	Ť	-5	Create a class for animal	3 days	Wed 5/08/15	Fri 7/08/15	22	Elliot,Lennon,Pau
25	•	-5	Implement random orchard 'map' generation	3 days	Wed 5/08/15	Fri 7/08/15	22	Elliot,Lennon,Pau
			Task		Inactive Summary		External Tasks	
Project: 306gantt (1) Date: Thu 6/08/15 Split Milestone Summary			Split		Manual Task		External Milestone	\Diamond
			Milestone		Duration-only		Deadline	•
			Summary	1	Manual Summary Rollup		Progress	
			Project Summary		Manual Summary		Manual Progress	
			Inactive Task		Start-only	Г		
			inactive rask		Start omy			

D	0	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names
26	Ť	-5	Implement configurable maps an settings from file	d 1 day?	Sat 8/08/15	Sat 8/08/15	25,23,24	Elliot,Lennon,Pau
27	Ť	-	Unit/acceptance testing	1 day?	Sun 9/08/15	Sun 9/08/15	26	Everyone
28	Ť	-5	Documentation	7 days	Mon 3/08/15	Sun 9/08/15	22SS,27FF	Elliot,Lennon,Pau
29	Ť	-5	Prepare alpha demo	3 days	Mon 10/08/15	Wed 12/08/15	5 18,19,27,28	Everyone
30		*	Deliver Alpha demo	0 days	Thu 13/08/15	Thu 13/08/15	29	Everyone
31		-5	User Interface (GUI dashboard)	7 days?	Mon 10/08/15	Sun 16/08/15		
32	Ť	-5	Display robot state on GUI	6 days	Mon 10/08/15	Sat 15/08/15	27,28,18,19	Chang Kon,Guyve
33	Ť	-5	Display obstacle state on GUI	6 days	Mon 10/08/15	Sat 15/08/15	27,28,18,19	Chang Kon, Guyve
34	Ť	-5	Unit/acceptance testing	1 day?	Sun 16/08/15	Sun 16/08/15	32,33	Everyone
35	•	-5	Documentation	7 days	Mon 10/08/15	Sun 16/08/15	32SS,33SS,34FF	Chang Kon, Guyve
36		-5	Message passing	8 days?	Mon 10/08/15	Mon 17/08/1	5	
37	÷	-3	Pickers send messages to carriers when bin is full and dropped	3 days	Mon 10/08/15	Wed 12/08/15	5 27,28,18,19	Chang Kon,Guyver
38	Ť	-3	Carriers send messages to pickers when empty bins are dropped	s 3 days	Mon 10/08/15	Wed 12/08/15	5 27,28,18,19	John, Nikhil, Wesle
			Task		Inactive Summary		External Tasks	
			Split		Manual Task		External Milestone \diamondsuit	
Project: 206 gaptt (1)			Milestone ◆		Duration-only		Deadline +	
	Project: 306gantt (1) Date: Thu 6/08/15		Summary		Manual Summary Rollup		Progress	
	- '	,,	Project Summary		Manual Summary		Manual Progress	
			Inactive Task		Start-only	Е		
			Inactive Milestone		Finish-only	3		
					Page 3			

)	0	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names
39	Ť	-5	Robots able to subscribe to topics to receive messages	3 days	Mon 10/08/15	Wed 12/08/15	27,28,18,19	Chang Kon,Guyver,John,
40	•		Create message files for the above messages	3 days	Mon 10/08/15	Wed 12/08/15	27,28,18,19	Chang Kon,Guyver,John,
41	•	-5	Maintaining carrier and picker state so the communication is triggered a the right times		Thu 13/08/15	Thu 13/08/15	38,39,40,37	Elliot,Lennon,Pau
42	•	-3	Communication between other robots (eg. Picker to picker, carrier t carrier)	2 days o	Fri 14/08/15	Sat 15/08/15	41	Elliot,Lennon,Pau
43	•	-9	Unit/acceptance testing	1 day?	Sun 16/08/15	Sun 16/08/15	42	Everyone
44	•	-5	Documentation	7 days	Mon 10/08/15	Sun 16/08/15	38SS,39SS,40SS,4	Everyone
45		*	GUI and message passing complete	1 day?	Mon 17/08/15	Mon 17/08/15	34,35,43,44	
46		-9	Implement robot interactions	8 days?	Mon 17/08/15	Mon 24/08/15	5	
47			Robots maintain message memory	2 days	Mon 17/08/15	Tue 18/08/15	34,35,43,44	Elliot,Lennon,Pau
48		-5	Co-ordinate kiwifruit collection and bin movement	4 days	Wed 19/08/15	Sat 22/08/15	47	Elliot,Lennon,Pau
49	•	-3	Unit/acceptance testing	1 day?	Sun 23/08/15	Sun 23/08/15	48	Everyone
50	•	-9	Documentation	7 days	Mon 17/08/15	Sun 23/08/15	47SS,49FF	Everyone
			Task		Inactive Summary		External Tasks	
			Split		Manual Task		External Milestone \Diamond	
Project: 306gantt (1) Milestone			Milestone		Duration-only		Deadline +	
-		5/08/15	Summary		Manual Summary Rollup		Progress	
Project Summary			Project Summary		Manual Summary		Manual Progress	
					Start-only	Г		
			Inactive Task		Start-Only	_		

D	0	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names	26
51		*	Robot interactions complete	1 day?	Mon 24/08/15	Mon 24/08/15	49,50		
52	Ť	-	Prepare final demo	3 days	Mon 24/08/15	Wed 26/08/15	49,50	Everyone	
53		*	Deliver Final demo	0 days	Thu 27/08/15	Thu 27/08/15	52	Everyone	
54		-							
55	0	-5	Team meetings	29 days	Mon 27/07/15	Mon 24/08/15			





















