

Task Name	Group Member	Finish by Date/Due	Sep-15			Oct-15			Nov-15			Dec-15			Jan-16			Feb-16			Mar-16			Apr-16										
			1	8	15	22	29	6	13	20	27	3	10	17	24	1	8	15	22	29	5	12	19	26	2	9	16	23	1	8	15	22	29	5
Individual Behavior																																		
Research Kilobot Sensors	Jared	September 28, 2015	[Blue bar from Sep 15 to Sep 28]																															
Research Kilobot Communication Protocol	Jared	October 12, 2015	[Blue bar from Sep 15 to Oct 12]																															
Research Q-bot Image Processing	Ryan/Greg	October 5, 2015	[Blue bar from Sep 15 to Oct 5]																															
Research Q-bot Sensors	Ryan/Greg	September 28, 2015	[Blue bar from Sep 15 to Sep 28]																															
Research Q-bot Communication Protocol	Ryan/Greg	October 19, 2015	[Blue bar from Sep 15 to Oct 19]																															
Research E-puck Sensors	Brittany	October 26, 2015	[Blue bar from Sep 15 to Oct 26]																															
Research E-puck Communication Protocol	Brittany																																	
Individual Communication																																		
Research/Test Kilobot - Kilobot	Jared	October 19, 2015	[Blue bar from Sep 15 to Oct 19]																															
Research/Test E-puck - E-puck	Brittany	December 14, 2015	[Red bar from Nov 17 to Dec 14]																															
Research/Test Qbot - Qbot	Ryan/Greg	November 2, 2015	[Blue bar from Sep 15 to Nov 2]																															
Integrated Communication																																		
Test Kilobot - E-puck	Jared/Brittany	December 14, 2015	[Blue bar from Nov 17 to Dec 14]																															
Test Kilobot - Qbot	Jared/Ryan/Greg	November 16, 2015	[Blue bar from Oct 19 to Nov 16]																															
Test E-puck - Qbot	Brittany/Ryan/Greg	December 14, 2015	[Red bar from Nov 17 to Dec 14]																															
Algorithm Design																																		
Design Linear Based Model	All	December 14, 2015	[Blue bar from Nov 17 to Dec 14]																															
Integrated Behavior																																		
<i>Formation Control Behavior</i>																																		
Localization	All	January 25, 2016	[Blue bar from Nov 17 to Jan 25]																															
Point Convergence	All	January 25, 2016	[Red bar from Jan 5 to Jan 25]																															
Leader Follower	All	January 25, 2016	[Blue bar from Nov 17 to Jan 25]																															
<i>Flocking Behavior</i>																																		
Neighbor Repulsion	All	February 1, 2016	[Red bar from Jan 19 to Feb 1]																															
Endpoint Attraction	All	February 1, 2016	[Red bar from Jan 19 to Feb 1]																															
Heading	All	February 1, 2016	[Red bar from Jan 19 to Feb 1]																															
Testing																																		
Software Implementation	All	March 7, 2016	[Blue bar from Sep 15 to Mar 7]																															
Hardware Implementation	All	March 7, 2016	[Red bar from Jan 5 to Mar 7]																															
Deliverables																																		
Project Proposal - Oral Presentation	All	October 1, 2015	[Blue bar from Sep 15 to Oct 1]																															
Project Proposal - Document	All	October 15, 2015	[Blue bar from Sep 15 to Oct 15]																															
Webpage Release	All	October 28, 2015	[Blue bar from Sep 15 to Oct 28]																															
Fall Progress Presentation	All	November 19, 2015	[Blue bar from Oct 19 to Nov 19]																															
Fall Performance Evaluation	All	November 19, 2015	[Blue bar from Oct 19 to Nov 19]																															
Fall Performance Review	All	December 3, 2015	[Blue bar from Nov 17 to Dec 3]																															
Spring Progress Presentation	All	February 18, 2016	[Red bar from Jan 19 to Feb 18]																															
Student Expo Abstract	All	March 18, 2016	[Red bar from Feb 18 to Mar 18]																															
Project Demonstration	All	March 24, 2016	[Red bar from Feb 18 to Mar 24]																															
Final Presentation	All	April 7, 2016	[Red bar from Mar 18 to Apr 7]																															
Student Expo Poster Printing Deadline	All	April 11, 2016	[Red bar from Mar 18 to Apr 11]																															
Student Expo Poster Setup	All	April 12, 2016	[Red bar from Mar 18 to Apr 12]																															
Student Expo	All	April 14, 2016	[Red bar from Mar 18 to Apr 14]																															
Final Report (Draft)	All	April 14, 2016	[Red bar from Feb 18 to Apr 14]																															
Final Report	All	April 28, 2016	[Red bar from Feb 18 to Apr 28]																															
Final Web Page	All	April 28, 2016	[Red bar from Mar 18 to Apr 28]																															
Advisory Board Poster Printing Deadline	All	April 28, 2016	[Red bar from Mar 18 to Apr 28]																															
Advisory Board Poster Presentation	All	April 29, 2016	[Red bar from Mar 18 to Apr 29]																															

Complete In progress

This week Jared began to work with Brittany on a method of communication between the kilobots and E-pucks. It was determined that the E-puck's IR proximity sensors can act as a message receiver and transceiver. Initial testing shows that sending a message is indeed possible. Brittany and Jared will continue to work on this part of the project. Greg and Ryan were able to get a Qbot to move in a general sinusoidal trajectory. However, it would flatten out into a line after about one or two periods. They did a few MATLAB simulations with the sinusoidal algorithm with different initial conditions. The simulations did not dampen into a line like our Qbot did. They were able to alternate connections of a Qbot server between two Qbot clients. Finally, Ryan and Greg went to Markin at Bradley University to test the flocking and point consensus algorithms in a more spacious area. The team is getting back on track, and hopes that next semester the team will be ahead of schedule.