NOVEL
Weekly Progress Report #3
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This Week's Goals

Based on our previous weekly report, the goals for this week were:

Raphael	Test and refine the lidar detection node to give localization
Thomas	Test and refine the node to publish an expected lidar scan from pose data
Austin	Write the action node to make decisions based on detected objects

This Week's Progress

Raphael	Node works, publishes approximate locations with relatively good accuracy. Works with multiple objects.
Thomas	Node works, refinement of certain parameters is ongoing.
Austin	First draft of node works, integrated with amcl_demo launch file. When marker is detected, robot in simulation will move in opposite direction of where marker is

Changes in Project Scope/Goals

Lessons Learned

Raphael	
Thomas	Launch files are much nicer to play with than I thought. I shouldn't stress about publishing big messages because it happens quickly anyway.
Austin	

Next Week's Goals

Slightly altered from our project proposal and incorporating our lessons learned, next week's goals are:

Raphael	Get code for object detection using LIDAR running on hardware.
Thomas	Get code for retrieving expected LIDAR scan running on hardware.
Austin	Implement specifics for action node ● Will designate a group of marker id's to run away from and another group to observe more closely ● Case 1: detect marker to run away from, find furthest accessible point from marker for robot to move to ● Case 2: detect marker to get a better look on, send command using move_base to orient robot such that marker is close to center of image ● Case 3: while robot is moving / rotating to another goal, if different marker is detected, override previous goal with new goal

These goals have been updated due to missing a few testing goals this week. The changes have been *italicized.*