Project 2 - "Robot Motion with IR"

Project 2 Grading

Name: _____

Item	Grade	Points	Out of	Initials / Date	Due
Checkpoint 1	**On-Time:** ---- **Late:** 1Day ---- 2Days ---- 3Days ---- 4+Days --- Zero --- Check Minus --- Check --- Check Plus ---		10		EOC 9 Apr
IR Decoding	**- Using the test.ino file fill in code and analyze IR signal. Picture of from the logic analyzer (or oscilloscope), tables of logic half pulse counts, and hex codes for your IR remote. This will all be in your report as well.**				
Required Functionality	**On-Time:** ---- **Late:** 1Day ---- 2Days ---- 3Days ---- 4+Days --- Zero --- Check Minus --- Check --- Check Plus ---		40		EOC 16 Apr
Robot Motion w/ IR Remote	**- Demonstrate that you can use your IR Remote to move your robot forward, backward, left turn, right turn, and vary the speed of the motors. The robot should perform these movements while completely disconnected from a computer (i.e. no USB cord)?**				
A Functionality	**On-Time:** ---- **Late:** 1Day ---- 2Days ---- 3Days ---- 4+Days --- Zero --- Check Minus --- Check --- Check Plus ---		15		EOC 23 Apr
Wall Following & Obstacle Avoidance	**- Using your ultrasonic sensor and servo demonstrate that your robot can follow a wall (i.e. staying within a foot of the wall without touching it) and navigate around two obstacles based on the obstacle course shown in project write-up.** **- Demonstrate that your robot navigate around the two obstacles and along the wall for 20 feet (i.e. staying within a foot of the wall without touching the wall or the obstacles).**				
Code Style and Git Use	**On-Time:** ---- **Late:** 1Day ---- 2Days ---- 3Days ---- 4+Days --- Zero --- Check Minus --- Check --- Check Plus ---		10		EOC 25 Apr
	- Effectively commits code often and with effective commit messages -- you should be committing each day at a minimum. **- Code contains headers, good comments, and good coding practices**				
Lab Report	**On-Time:** ---- **Late:** 1Day ---- 2Days ---- 3Days ---- 4+Days --- Zero --- Check Minus --- Check --- Check Plus ---		25		BOC 25 Apr
	- See project report template and Rubrick				
Competition Bonus	**- Demonstrate that your robot navigate around the two obstacles and along the wall for 20 feet (i.e. staying within a foot of the wall without touching the wall or the obstacles). Using your ultrasonic sensor and servo to avoid an obstacle against the wall.**				
Total			**100**		