Looney Code - Contactless Control

EC327 - Intro to Software Engineering
Project Manager: Christian So

Project Start:	11/28/22
Display Week:	1

Nov 28, 2022 week 1 — Dec 5, 2022 week 2 — Dec 12, 2022 week 3

TASK	Owner	PROGRESS	START	DAYS	END
Hardware					
Build Chassis	Christian	100%	11/24/22	3	11/26/22
Create Circuit	Christian	100%	11/27/22	4	11/30/22
Integrate Power Supply	Christian	100%	12/1/22	3	12/3/22
Test Power Supplies	Christian	100%	12/4/22	3	12/6/22
Software					
Research Software Developing with Leap Motion SDK and sensor	Christian	100%	11/28/22	1	11/28/22
Create Visual Representation of hand	Beren	100%	11/29/22	3	12/1/22
Research on Communication between Leap Motion and Arduino Uno	Christian	100%	12/2/22	3	12/4/22
Establish serial communication between Processing and Arduino	Christian	100%	12/4/22	2	12/5/22
Research how to hack 393 VEX Motors with Arduino	Christian	100%	12/5/2022	2	12/6/2022
Make motors turn forwards and backwards at varying speeds with Arduino	Christian	100%	12/6/2022	2	12/7/2022
Make motors turn with Processing serial values	Christian	100%	12/7/2022	1	12/7/2022
Create an algorithm to distinguish forwards and backward turning with 8-bit values from Processing	Christian	100%	12/7/2022	4	12/10/2022
Create an algorithm to detect hand grabs in in Processing and set the initial handle bar position	Jiahe	100%	12/4/22	2	12/5/22
Calculate the error of the handle bar and the position of the hand grabbing	Jiahe	100%	12/5/2022	3	12/7/2022
Create Motor class and Motor Header Files	Christian	100%	2/10/2022	2	12/11/2022
Implement Motor class	Christian	100%	12/11/22	3	12/13/22
Add functions to rotate and resize the graphics	Beren	100%	12/4/2022	3	12/7/22
Create PID control system in main	Jiahe	100%	12/6/2022	4	12/9/2022
Tune PID for forwards and backwards	Jiahe	100%	12/7/2022	3	12/9/2022
Create PID class and PID header files	Jiahe	100%	12/8/2022	3	12/10/2022
Implement PID class	Jiahe	100%	12/9/2022	3	12/11/2022
Research Graphics Manipulation in Processing	Beren	100%	12/6/2022	4	12/9/2022
Add Graphical bar that reacts with hand	Beren	100%	12/7/22	2	12/8/22
Add graphical fist to indicate grab	Beren	100%	12/8/2022	3	12/10/2022
Make handle bar move on the screen with hand	Christian	100%	2/10/2022	3	12/12/2022
Retrieve Yaw value of hand	Jiahe	100%	12/9/22	2	12/10/22
Create new turning commands in Motor Class	Christian	100%	2/11/2022	2	12/12/2022
Tune PID for turning	Jiahe	100%	12/9/2022	2	12/10/2022
Integration					
Integrate/Tune motor power values for 393 motors in Arduino	Christian	100%	11/29/22	2	11/30/22
Run test values from Processing to Arduino through serial communicaition	Christian	100%	12/4/22	2	12/5/22
Test command switching between Processing and Arduino	Christian	100%	12/6/22	3	12/8/22
Debug PID	Jiahe	100%	11/29/22	2	11/30/22
Tune PID	Jiahe	100%	12/1/22	3	12/3/22
Implement turning/tune turning values	Jiahe	100%	11/29/22	2	11/30/22
Implement Graphics/tune graphics values	Beren	100%	12/1/22	3	12/3/22
Debugging	Team	100%	12/4/22	3	12/8/22
Documentation					
Create Gantt Chart/Project Timeline	Christian	100%	11/28/22	2	11/29/22
Project Architecture Slides	Team	100%	11/29/22	9	12/7/22
Shoot Video Clips	Team	100%	12/8/22	6	12/13/22
Edit Video	Christian	100%	12/14/22	3	12/16/22
Final Documentation	Jiahe	100%	11/29/22	4	12/2/22
Final Documentation	Beren	100%	11/29/22	4	11/2/22
Clean up/Wrap up	Team	100%	12/3/22	3	12/5/22
Submit	Team	100%	12/6/22	7	12/12/22