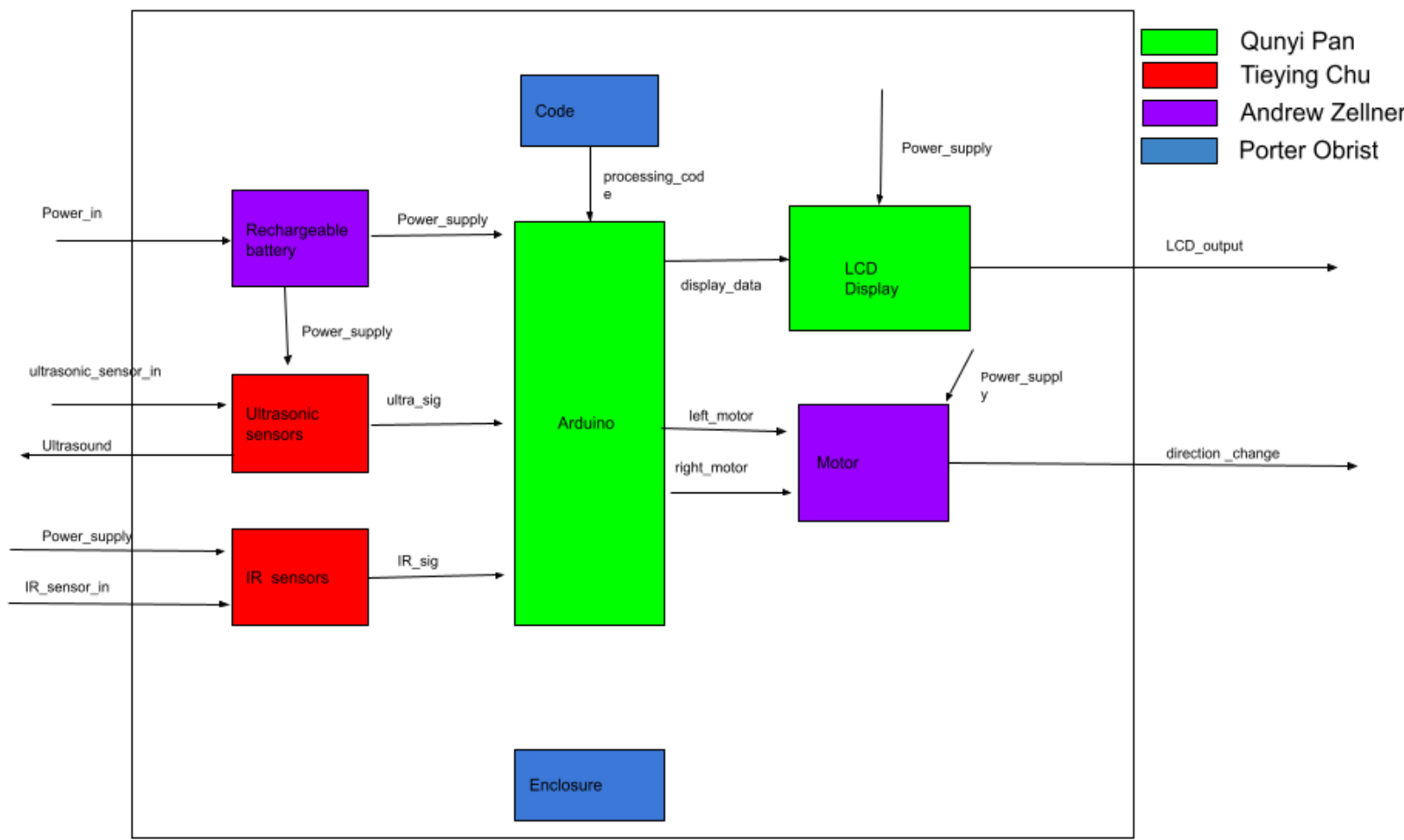


Block Diagram



Interface Definitions

Interface Name	Interface Type	Specification
Power_supply(Arduino)	DC Power	V = 5V I = 50mA
display_data	data	Status of each sensor and game situation
Power_supply(LCD Display)	DC power	V = 3.3V I = 0.2mA-1.2mA
Power_supply(ultrasonic sensor)	DC power	V=5V I=15mA
ultrasonic_sensor_in	envin	Ultrasonic waves reflected from objects 40 kHz
Ultrasound	asig	Ultrasonic sensors emit ultrasonic waves to detect the position of objects 40KHz
ultra_sig	dsig	High/low signal
Power_supply(IR sensor)	DC power	V = 3-5V I = 3mA
IR_sensor_in	envin	Detects infrared rays reflected by different objects Frequency range is 35KHz to 41KHz
IR_sig	dsig	High/low signal
processing_code	code	-Arduino programming language -Configure the pins
left_motor	asig	V= -6 to 6V No Load current: 190mA
right_motor	asig	V= -6 to 6V

		No Load current: 190mA
direction_change	envout	-Change the direction through the different speeds of the left and right motors -Speed without load: 90±10rpm
LCD_output	envout	Sensor status display