GO BABY GO RIDE-ON RACECAR
AUTONOMOUS STEERING AND STOPPING SYSTEM

DINA NABUTOVSKY RONNIE BRADY RUDY LIBERTINI

ENTREPRENEURIAL SENIOR DESIGN

WHAT IS GO BABY GO?

. Focuses and promotes early mobility
  . Low-cost and high impact technology
. Modified ride-on racecars
  . Children who are unable to move independently
. Positively impact a child's development and performance
  . Physical
  . Mental
  . Social-Emotional

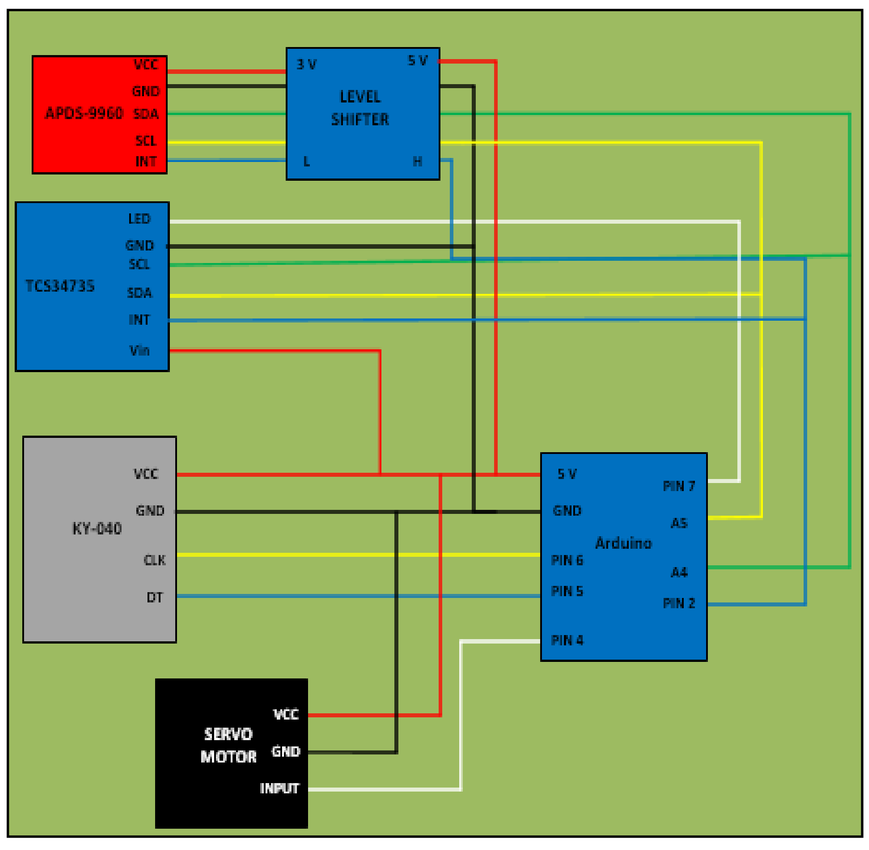
THE PROBLEM

. Children ride these cars throughout their homes
  . Develop muscles and mobility functions
. Parents and guardians steer the car
  . High amount of physical demand
. PVC Pipe Guided Track
  . Repositions wheels
  . Track disassembles during use

DESIGN OBJECTIVES AND SOLUTIONS

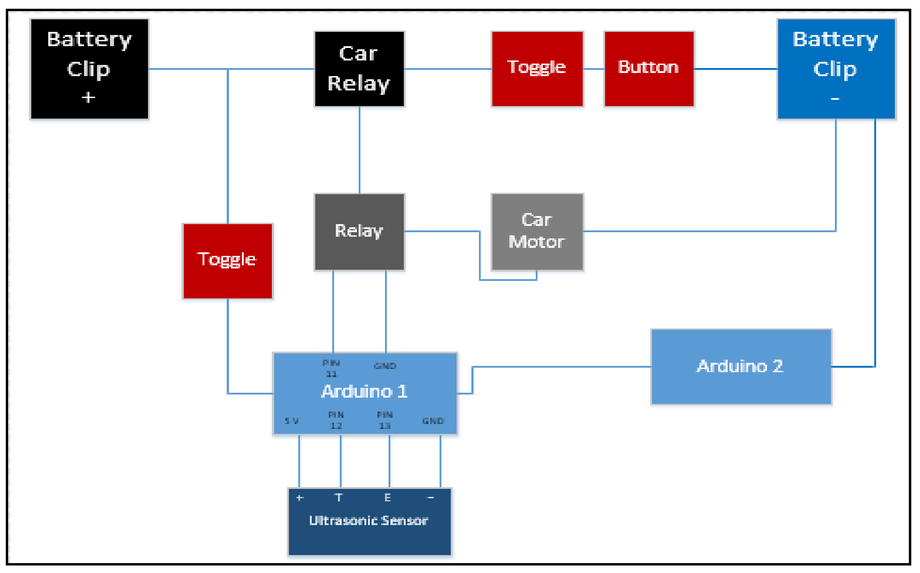
AUTOMATIC OVERRIDE STEERING

. Steer the car with no parent interaction
. 2 RGB sensors will detect specified path
. Arduino will tell servo motor which way to turn
  . Dependent on which sensor reads the line
  . Left sensor , steer right
  . Right sensor, steer left
. Rotary encoder detects angle of wheel
  . Tell servo motor angle of turning



COLLISION DETECTION

. Automatically stop the car when obstacle is within vicinity
. Arduino compatible ultrasonic sensor detects obstacle



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