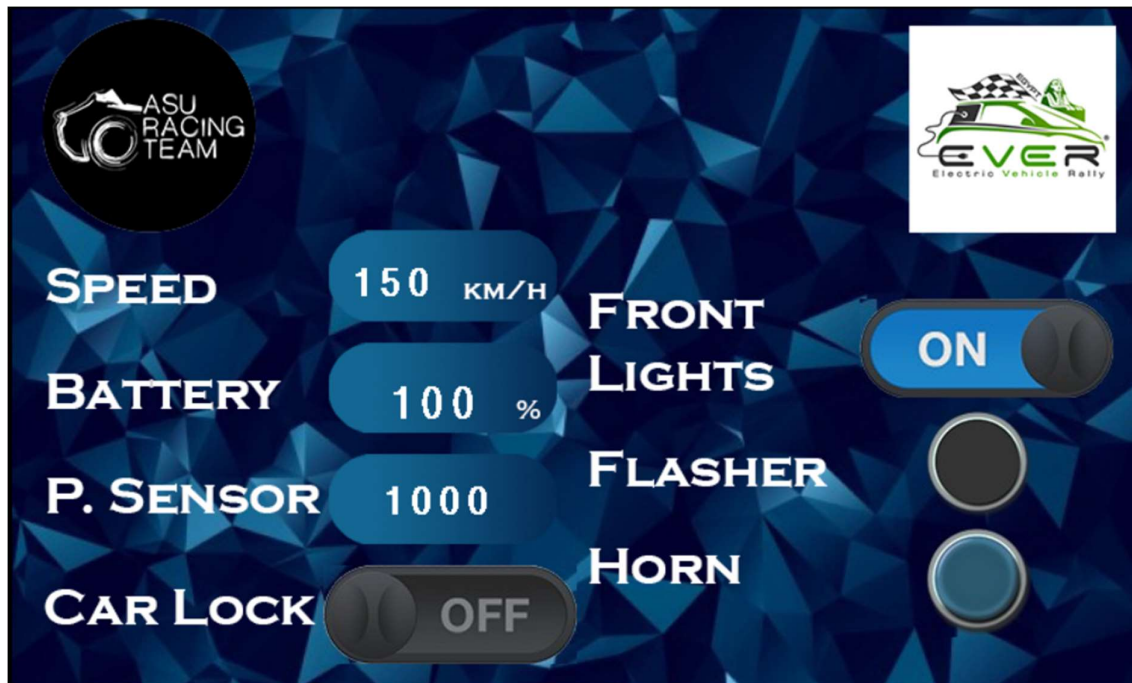


LV Final Task – Report

GitHub Repository:

<https://github.com/omarbeendeaded/LV-Final-Task/tree/final>

GUI:



- Readings from Arduino are displayed on the left side.
- Input buttons on the right.
- Front lights toggle button.
- Flasher and horn are hold buttons.

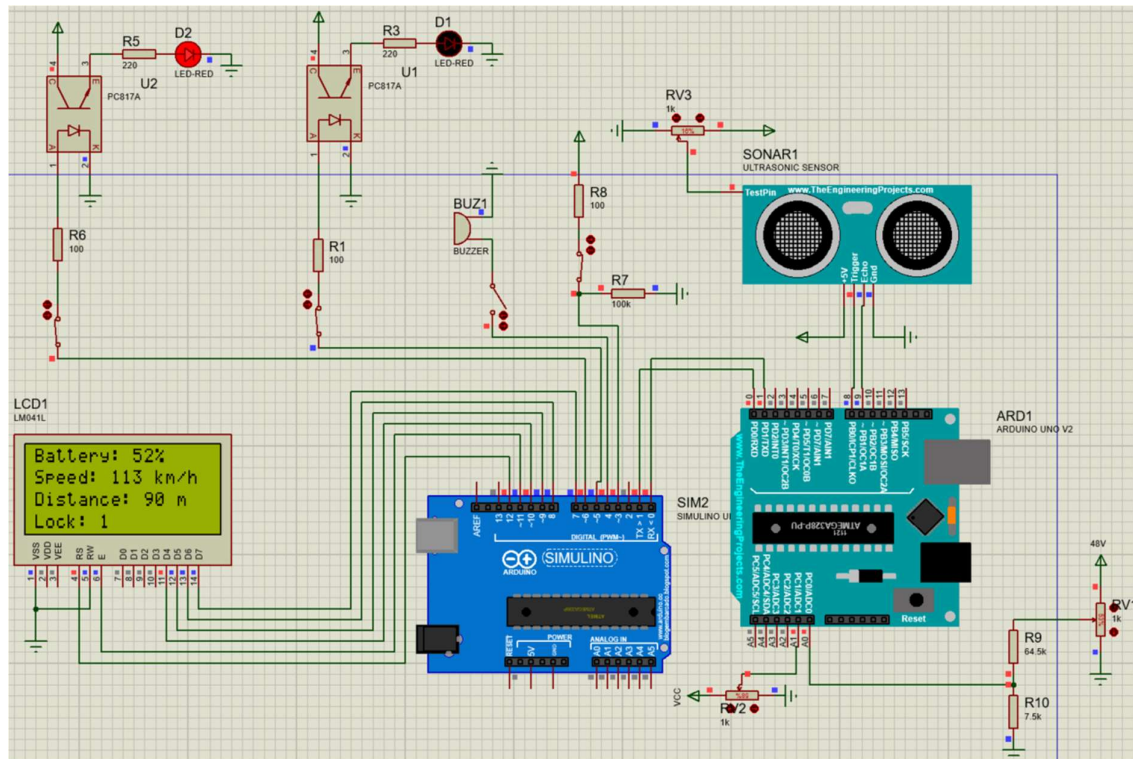
Code:

- Secondary Arduino reads values from potentiometer, voltage sensor, ultrasonic sensor and sends them to primary Arduino.
- Primary Arduino reads data from lock button then transmits the first 4 pieces of data to LCD.
- Primary Arduino reads data from LCD and switches lights, flasher, and horn accordingly .
- Addresses of each text box or button:

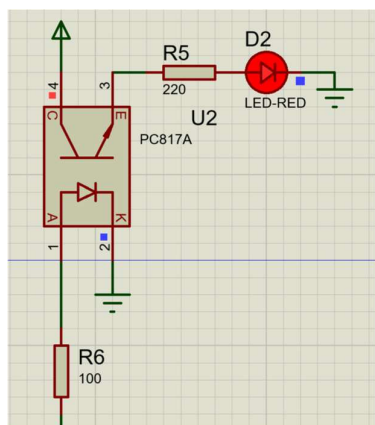
Text/Button	Address
Speed	0x1000

Battery Percentage	0x1100
Parking Sensor	0x1200
Car Lock	0x1300
Front Lights	0x1400
Flasher	0x1500
Horn	0x1600

Schematic:



- Switches used to simulate inputs from LCD.
- Front lights and Flasher gate driver circuit:



Optocoupler is used to isolate circuits.