In this project, I was able to successfully program the motors to go forward, turn left, turn right, go backward, and stop. I was able to program the magnetometer to read data from all 3 axis, read from all 9 ADC channels, and determine distance from the ultrasound. I was not able to get the state machine implemented for the car to navigate the grid. In summary, I was able to get the individual parts to work, but the overall function of the device does not function.