Midsemester Demo

C. A. R. T. S.
Completely Automated Retail Transaction System

18-549 Team 13 (Shark Laser)

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Status Update

- This project will expedite the checkout process in retail stores.

- Current status - both RFID and load sensor parts are individually functional and interfacing with the Arduino

C. A. R. T. S.
Load Sensor Demo
Load Sensor Demo
Load Sensor Analysis

• Load sensor circuit needs to be updated with an RC filter to improve reading accuracy

• Need an ADC with higher granularity than on-board Arduino (Arduino only has 10 bits) - will be ordered by Thursday

• Improve algorithm for detecting impulses in weight reading - currently comparing reading to a moving average

• Revised target of accuracy to 50 grams

• Will focus on calibration once demo cart/structure is established
RFID Reader Demo
RFID Reader Analysis

- Look to find an RFID reader with better range - currently only getting 3”
- Order additional RFID parts - the sensor we have works and we are able to interface with it easily (done by Thursday)
- Switch from Arduino Leonardo to Arduino Mega - need additional serial ports to accommodate more RFID readers
Questions?