492 - Group 11

Auto Window Blinds

Week 4 Report

9/17-9/30
Client: Lee Harker
Faculty Advisor: Lee Harker

Team Members:

Andrew Deick - Front-end Software Lead
Caleb Townsend - Hardware Lead
Daniel Andrews - Team Lead
Hieu Nguyen - Communication Lead
Jacob Nett - Back-end Software Lead
Logan Shada - Design Lead

Past Week Accomplishments

- Frontend Backend Connectivity - Jacob
    - Research into making http request in nodejs
- Frontend - Andrew & Daniel
    - Work in Authentication Services
        - Implemented Prototype with GitHub single-sign on
        - Research into using Google or Okta SSO
    - Location Services
        - Testing on location accuracy
        - Working to integrate into frontend html/js
- Hardware - HW team - Logan, Hieu, and Caleb
    - Re-built prototype
    - Wiring/connection problem unknown
    - Need to fix wiring problem so first prototype will work again
    - Found parts and ordered them
- Ordered parts - Caleb

- Step motor
- Shaft encoder
- Step motor controller

Pending Issues

- Authentication Implementation
- Long-term battery
- Fix prototype
- Ki-cad design for PCB

Individual Contributions

Team Member	Contribution: description of what you did (last 2 weeks)	Last 2 weeks (hours)	Total (hours) Since 9/5
Daniel Andrews	● Location Service Testing ● Location Service Integration ● Setting/organizing team meetings	10	20
Andrew Deick	● Learn details of oauth ● Implement GitHub Authentication ● Research Google and Okta setup	12	22
Jacob Nett	● Precision motor research ● HTTP on js research	10	22
Hieu Nguyen	● Got COVID the first week and half didnt do anything ● PCB board research and design	5	15
Logan Shada	● 3D model creation and printing ● Determined stepper motor to use ● Determined precision rotation measurement device to use with shaft ● Helped to find stepper motor driver	10	19
Caleb Townsend	● Researched and ordered parts including shaft encoder, stepper motor, and stepper motor controller ● More TLA research time ● Spent time with old model remembering how it works and goes together	5	12

Plans for coming weeks

- Location Service implementation
- Test current prototype
- Find new parts (motor, control, battery, etc.)
- Work with ordered parts as they arrive
- Work on PCB design