EE/CPRE/SE 491: sddec22-11

Mini Retrofit Blind Controller

Weekly Report #10 - & SEMESTER summary
Start date: April 11 (Monday), 2022- May 6th (Friday), 2022
Client: ECPE
Faculty Advisor: Lee Harker

Team Members:

- Daniel Andrews - TEAM LEAD
- Andrew Deick - Front-End Software LEAD
- Jacob Nett - Back-End Software LEAD
- Hieu Nguyen - Communication LEAD
- Logan Shada - Design editor, Hardware director, Team overlap connection
- Caleb Townsend Hardware Lead and Maintenance Lead

Weekly Meeting time (decided):

- Team Meeting:
  - Monday: 9:55 AM - 10:50 AM
  - Friday: 9:55 Am - 10:50 AM
- Individual Hardware and Software meeting:
  - Thursday: 2:10 PM - 3:10 PM
- Advisor Meeting: (bi-weekly)
  - Monday: 9:55 AM - 10:50 AM

Accomplishments:

- Test code for UDP packet receiving for arduino
- Prototype from Server to blinds.

Pending Issues:

- Ordering new parts
- PCB design learning

Upcoming Tasks (next semester):

- Implement authentication
- Implement location services
- Fix Back-End

- Make PCB via KiCad
- Implement in TLA (put into box, use velcro)
- (optional) Solar charging capability

Ordering

- Tubing arrived (3/8th and 5/16th)

- New additional mini microcontroller arrived

Individual Accomplishments:

Team Member	Contribution: description of what you did (last 4 weeks)	Last 4 weeks (hours)	Total (hours)
Daniel Andrews	• Helped with HTTP requests on back and on front end • Helped prepare for demo/presentation • Organized team meetings	5+5+7+10 = 27	72
Andrew Deick	• Created HTTP requests for the Front-End, researched Back end, and troubleshooting back end	4+4+7+8= 23	71
Jacob Nett	• UDP motor control code. • Controller to Arduino code	5	75
Hieu Nguyen	• Motor testing • Testing motor connect to blind for presentation • Did some work on pcb • Run around trying to find the missing part/ order / tubing. • Wiring protype HW component.	6+6+6+8= 26	70
Logan Shada	• Prototype testing • Wiring in components • Material research for housing • Looking into the preferred PCB creation software	5+6+6+5= 22	68
Caleb Townsend	• Putting prototype HW components together • Testing different connections from motor to blinds • Supporting team members	5+6+6+5 =22	59