

492 - Group 11

Auto Window Blinds

Bi-Weekly Report 1

9/5-9/16

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

- Backend - Jacob
 - Backend rework(database and hardware control code)
 - Database connection setup
- Position Tracking - Jacob
 - Research into alternate motor options
 - Research into absolute position tracking
- Frontend - Andrew & Daniel
 - Investigation into Authentication Services
 - Location Services
 - Chosen to Move forward with Mapbox
 - Mapbox setup/code start
 - Preliminary code/testing
- PIRM Presentation - All
 - Prep Presentation
 - Give Presentation

- Hardware - HW team - Logan, Hieu, and Caleb
 - Researched attachments for blind
 - Potential prototype made via 3d printing
 - Discussion about battery, model, and motors
 - Discussion of electrical box for components
- Research - Caleb, Hieu(different time frame)
 - In about 5 hours of time spent in the TLA, made observations about the usage of the blinds.
 - Some blinds near left end have vegetation growing on the windows outside
 - Not a single person used the blinds to either open or close them
 - Blinds remained open the whole time

Pending Issues

- MapBox Location Testing
- Authentication Implementation
- Long-term battery
- Need to find either a stepper motor or motor with set positions to control the blind movement

Individual Contributions

Team Member	Contribution: description of what you did (last 2 weeks)	Last 2 weeks (hours)	Total (hours) Since 9/5
Daniel Andrews	<ul style="list-style-type: none"> ● Location Service Research ● Location Service Setup ● PIRM presentation/prep 	10	10
Andrew Deick	<ul style="list-style-type: none"> ● Work with oath ● Research on mapbox 	10	10
Jacob Nett	<ul style="list-style-type: none"> ● Backend rework ● Motor solution research 	12	12
Hieu Nguyen	<ul style="list-style-type: none"> ● Look into Stepper Motor <ul style="list-style-type: none"> ○ Different style we can use ○ The cost/budget ● Research on power bank/power supply <ul style="list-style-type: none"> ○ Way to power the device without plug in 	10	10
Logan Shada	<ul style="list-style-type: none"> ● 3D model creation and printing ● Research on stepper motors ● Research on electrical boxes ● Material property research 	9	9
Caleb Townsend	<ul style="list-style-type: none"> ● Assisted team in hardware discussion and prototype development ● Conducted research on the TLA blind area 	7	7

Plans for coming weeks

- Location Service Test/Implementation
- Test current prototype
- Find new parts (motor, control, battery, etc.)
- Work on PCB design