EE / Cpr E / SE 492 - SDMAY 21 - 48
Learning Holiday Light Display
Week 2 Report

Feb 8, 2021 - Feb 22, 2021
Client and Faculty Advisor: Dr. Daniels

Team Members:
Christopher Woods - Chief Software Engineer
Ty Gardner - Chief Engineer (Computer Vision)
Jacob Martin - Chief Computer Engineer
Ashkirat Singh - Meeting Facilitator
Mitchell Wadle - Meeting Scribe
Joyeux Noel - Report Manager

Past Week Accomplishments:
Mitchell:
Researched and designed the schematics for the motorization of the Lazy Susan

Jacob:
Designed the initial stage of calibration, and also commented all the code from previous senior design teams

Joyeux:
Revised the plan for interfacing with the Lazy Susan

Chris:
Completed and tested the code implementation for mapping the four sets of cartesian coordinates into one set of cylindrical coordinates, redesigned coordinate storage system from csv to json

Ty:
Reconfigured the pattern mapping files to use the new json format, added the min and max values to the json file, and made outline for the animating process

Ash:
Revised the code for image processing and researched the various techniques for animating the LEDs with basic animation libraries

Pending Issues:

- Test the design of motorizing the Lazy Susan - Mitchell and Joyeux

Individual Contributions:

Team Member	Contribution	Weekly Hours	Total Hours
Jacob Martin	Continued work on the calibration feature that will be used by Chris eventually	5	22
Chris Woods	Work regarding math formulation for optimization	6	26
Ty Gardner	Continued work related to the animation feature	5	22
Ash Singh	Continued work related to the animation feature	5	24
Joyeux Noel	Designed and revised schematics for the motorization of Lazy Susan	5	20
Mitchell Wadle	Designed and revised the preliminary schematics that will guide the Lazy Susan motorization process	5	20

Plans for Coming Week:

- Lazy Susan - Joyeux and Mitchell
    - Test the which motor is best suited for motorizing the Lazy Susan, and start adding the interface for controlling this functionality using the Tree Pi

- Animation - Ty and Ash
    - Break up the surface of the cone into 10 slices or faces and add a background image for the animation feature

- Calibration - Chris and Jacob
    - Continue working on the main calibration feature that will guide the tasks for the remainder of the semester, create a working implementation of coordinate conversion