EE/CprE/SE 492 BIWEEKLY REPORT 5
10/23 - 11/5
Group number: 10
Project title: Holiday Arboreal Light Project
Client &/Advisor: Tom Daniels x 2
Team Members/Role:

Aaron - Raspberry Pi and Inter-process Communications
Rob - Android Developer
Rajiv - Web App Dev/Android Dev
Justin - Web App Dev
Michael - Image processing/data storage

Weekly Summary:

Worked on sending video to the PHP scripts on the web server from the Android app, as well as some more development on the LED manager. Tested data with light detection algorithms.

Past Week Accomplishments:

We decided on an implementation for the LED manager, as well as the method of capture from the Android app and sending that to the web server, then web server to LED manager.

Pending Issues (if applicable):

PHP scripts not performing like they are supposed to.

Individual Contributions (optional but must include hours worked):

Name	Individual Contributions	Hours this week	Cumulative hours
Aaron	Worked on developing the LED manager, looked at different ways to do the inter-process communication (sockets vs .lck files), discussed with Justin how we want the web server and LED manager to communicate	8	33
Rob	Worked on adding a method to the Android app to take and send a video to the web server. Decided on video as Michael said that would work best for his needs.	7	34
Rajiv	Worked with Rob to take/send video from Android application to the Apache web server	6	30
Justin	Worked with Aaron deciding on a way to have	6	31

	with web server to communicate with the LED manager depending on whether we use .lck files or sockets. Worked on pattern selection web page to improve functionality.		
Michael	I created some data to test with based on videos I took on my phone. These needed to be hand parsed (aka will need to figure out how this will be done) Added am implementation to click on images and get accurate values of LED's to test against.	6	32

Comments and Extended Discussion (optional):

Plans for Upcoming Week:

Name	
Aaron	Get a barebones implementation of the LED manager up and running, change the strand.py file into a class file that can be used by the manager
Rob	Finish implementing the method for the video; video is currently taken and and HTTP Post request is made to a PHP script on the server, but nothing has been saved. Need to troubleshoot that problem and figure out what it could be.
Rajiv	Complete the sending video to web server function. Hopefully can find what is wrong with the PHP script because it is current not accepting any video files.
Justin	Work further with Aaron to implement a communication method and get things up and running between the web server and the LED manager. Add more content to the website, look into the creation of custom patterns.
Michael	Need to work on what I discussed with Dr. Daniels in our last meeting. I can try and get the value of the LED's based 2 sides and their respective coordinates. If this value is fairly accurate then using the triangle angle discussed with Dr. Daniels might not be required. So I'll be working to create these values from two sides of an image.

Summary of Weekly Advisor Meeting:

Dr. Daniels discussed the opening of files and how they can be used to create mutexes and locks on certain files for the implementation of the LED manager. We also discussed possibly using sockets for communication, but settled on the files due to preservation of previous state being important and socket communication is not as easy to preserve. Dr. Daniels provided some more information regarding the math behind calculating the LED's values. After talking with him twice he has provided two different methods which both should work and i'll work to implement one of these.