Journal Report 3
9/16/19-9/23/19
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Period 2, White

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## Daily Log

### Monday September 16

Continued debugging on the Hough Transform, attempted to change the function that converts HSV masked image to a rgb pixel image.

### Tuesday September 17

Early into the period, we talked and decided it would be a good idea for me to use the HSV masking I had already. The Hough Transform was proving to be more work than necessary, so it would be better for me to get some baseline images of the Perplexus in a realistic testing state (i.e without messy background and poor camera angle). I spent the period familiarizing myself with the Logitech Pro camera and installing the necessary harddrives to run the camera. Also, I took some preliminary pictures on my phone and attempted to remove glare by placing the Perplexus in a darkened cubby.

### Thursday September 19

I coordinated a little with my partner Khushi Chawla prior to the class period and we decided that a Raspberry Pi would be the way to sync our two portions of the project. As such, I found a Raspberry pi and wiped the driver clean, going on to re-download necessary software. I haven't worked much in the past with a Raspberry Pi, so I am also researching the different ways in which I can connect cameras and deploy my code to the device.

## Timeline

| Date | Goal | Met |
|---|---|---|
| Today minus 2 weeks | Begin setup and research of Perplexus ball tracking | Yes, successfully met my goal. |
| Today minus 1 weeks | Locate the silver ball consistently and save coordinates | No, I changed the method I want to use for identification of the silver ball, and spent my time on that implementation |
| Today | Complete the implementation of the Hough Transform with respect to the HSV Masking | Decided to move onto a different course of action, i.e using RasPi |
| Today plus 1 week | Complete setup of Raspberry Pi | |
| Today plus 2 weeks | Obtain a sequence of images taken from consistent angles to run my code through during testing phases | |

## Reflection

I am coming to realize that a big part of my project is trying many different things to eventually pick the best path that I should take. The Raspberry pi does seem like the best idea out of the three that I have tried so far, but it's proving to be more difficult than I expected to learn how to use this unfamiliar piece of hardware.