Journal Report 9
11/11/19-11/24/19
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Daily Log

Monday November 11

Learned about using REST API's from an informational webpage, like what exactly is behind what's going on (GET, POST, DELETE). I will for obvious reasons mostly if not all the time be using GET requests in my project.

Tuesday November 12

Set up Python API to perform requests (using Python library 'requests')

Tried implementing requests Python library with barcodelookup.com, and wasn't getting good results - I wasn't getting proper returns from the API. Found out this was because barcodelookup.com is a completely paid API.

Spent time looking for free barcode lookup API's, and found one, upcdatabase.org (has a 100 lookup per day limit). Registered for an account and got a token for this website.

Thursday November 14

Before jumping straight into writing python code, used my browser to practice API requests for the upcdatabase.org API (using proper string format of the barcode ID and token). Achieved successful results.

Moved to writing code in Python - wrote code that is hard-coded for the barcode ID for now (aka a string variable in the program) and was able to generate successful API calls from Python.

Tested barcode lookup code with different barcodes.

Timeline

Date	Goal	Met
11/7/19	Finish linking all 3 systems together and finish implementation of barcode lookup API	Yes/No; The 3 systems link is not really where I want it to be for a final product (be able to run simulatenously, not just sequentially). Barcode lookup API is complete.
11/14/19	Link barcode lookup API with the rest of the system and begin looking into a lookup API for products found through logo recognition	No; Finished barcode lookup API, but didn't link it with rest of system
11/21/19	Finish implementation of barcode lookup API (FIRST priority)	Yes; Barcode API implementation successful!
11/28/19	First link barcode detection API to barcode lookup API and then maybe link it to the sequential 3 system program	
12/5/19	Finalize sequential stystem to be 100% working & begin turning it into a simultaneous system.	
Winter Goal	Finish implementation of simultaneous processing system (barcode+logo), link to a barcode lookup library, and find a database for lookups based on logo detection	

Reflection

This week, I was able to achieve the important priority of setting up the barcode lookup API! I'm really happy about that, because this means my project has a real concrete basis and I can build up strongly from here. This next week, I hope to link the barcode lookup API with the barcode detection API and hopefully to the sequential 3-system program. I think from here my priority is really going to shift to making the 3-system sequential program into a simultaneous program, as this is the next big step, and from here I can start to hopefully focus more on other aspects of the project (i.e. cameras in second semester). Overall, this week was a good week - I also got my GitHub stuff set up and my code that is recent with this journal is all uploaded there, so everything is good for that.