Journal Report 11 11/25/19-12/8/19 Rishabh Misra Computer Systems Research Lab Period 2, White

# **Daily Log**

### **Monday November 25**

Organized Github repo according to directions from Dr. White on Blackboard

### **Monday December 2**

Began approaching simultaneous system thoroughly, because I felt my sequential system was not complete, but good enough to move on to simulatenous.

After modifying files and such, came upon Google authentication credential error I've been grappling with on and off since the beginning of my project.

#### **Tuesday December 3**

Began approaching the Google credential authentication error - first tried adding to PATH again through command line, which seems to only work in the current terminal.

Tried downloading new credentials from the Google Cloud console, but this didn't work either.

Talked to Dr. White about problem, and while didn't have a solution to the credential issue yet, developed a plan to approach it.

#### **Thursday December 5**

Continued working on authentication error - had a breakthrough in realizing the problem with how I was implementing it was that I wasn't typing the file type correctly into the set statement in command line.

Completely resolved credential issue and cleaned up file - got a simultaneous system working!!! This is great, because it's the basis of my winter goal; to completely achieve it I just have to make some refinements.

Implemented python library subprocess to have the command line argument for setting the environment variable for Google Application credentials (Mr. White said this was a fine idea).

## **Timeline**

Date	Goal	Met
11/21/19	First link barcode detection API to barcode lookup API and then maybe link it to the sequential 3 system pro-	Yes; Barcode detection and barcode lookup systems successfully linked; linking to sequential 3 system pro-
	gram	gram not attempted
11/28/19	Begin setting up sequential system to be 100% working (resolve current errors) & begin turning it into a simultaneous system.	Yes in a way, because I got a basic sequential system working but I more so straight moved into turning it into a simultaneous system.
12/5/19	Continue developing sequential system and resolving errors and hopefully have some semblance of a simultaneous system	Yes; Some semblence of a simultaneous sytem set up; it seems to be running good and well
12/12/19	Update simultaneous model to have my final barcode code which includes both detection and lookup (currently only implement detection) and test si- multaneous model with various pic- tures and edit accordingly	
12/19/19	Make any final adjustments to simultaneous model and find logo detection lookup database. Possibly move on to further project tasks with time permitting.	
Winter Goal	Finish implementation of simultaneous processing system (barcode+logo), link to a barcode lookup library, and <u>find</u> a database for lookups based on logo detection	Almost; Have to make adjustments to simultaneous processing model

## Reflection

This week was extremely exciting with lots of good progress. I decided that instead of spending time working on the sequential model and then moving to the simultaneous model (which I thought would be easier and more natural) I decided to take a straight plunge into the simultaneous model. I grappled with the errors, but I was able to work through them and get a working model! This is great, because it is the large part of my winter goal. I'm going to talk to Dr. White about where I should go from here - I have some ideas, like possibly going into tracking objects from picture to picture or even looking at cameras. I will consult Dr. White with where to go next.