Journal Report 8 10/28/19-11/7/19 Steven Le Computer Systems Research Lab Period 1, White

Daily Log

Monday October 28

Spent the day installing flask onto this computer. To refresh my memory, I also looked up some basic flask server tutorials.

Tuesday October 29

Today, I continued the flask research I was doing last class and started on writing a basic server and an html to go along with it.

Thursday October 31

With the time we had after presentations, I managed to finish a basic server that displayed basic html text onto a localhost server.

Wednesday November 6

Today, I communicated with my partner on how we wanted the application to look. We decided that aesthetics probably weren't that important right now and agreed to do basic bootstrap for now. We also tried to research ways to have nodeJS servers interact with python code since my partner doesn't have experience using flask

Thursday November 7

Spent today coding an html file to represent the starting page of the application. I created a basic interface that has buttons that can load other html files.

Timeline

Date	Goal	Met
Today minus 2	Apply the linear regression model to	Yes, got a linear regression with a de-
weeks	the tomato data I collected	cently low error for my plant data
Today minus 1	Install what is needed for creating a	Yes, succeeded in both tasks
weeks	web application and start something	
	on a localhost server	
Today	start designing the application will	Created an html file outlining the
	look like	starting page
Today plus 1	create a starting page for the applica-	
week	tion	
Today plus 2	find a way for the web application to	
weeks	display graphs and start on incorpo-	
	rating parts of the edge detection into	
	the application	

Reflection

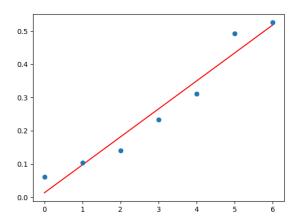


Figure 1: A graph depicting plant height (in meters) over a period of 7 weeks. The regression line has the equation y = 0.083x + 0.017 and a loss value of 0.0145

This is an example of one of my results from the edge detection, and is also the most linear growth pattern. While all of the plants followed an upward trend, a few had strange outlier points. When I grow my next batch of plants, hopefully I will be able to make the picture taking process more stable so the edge detection can more accurately detect height.

Now that we're finally past the edge detection portion of the project, we started on creating the application. With our background in web application design, I hope to get through this portion of the project relatively fast and work on the tomato disease portion afterwards. My partner and I debated on what to use to create the server. I brought up that we should use python's flask servers to make incorporating python easier. However, my partner is not familiar with flask, so he is deciding whether he wants to learn it or find a way to create a nodeJS server that can somehow interact with the code we already have.