EE 494 Spring 2023 Professor Dennis Hite

Weekly Progress Report: #8 23 March, 2023

Project: C.E.L.P. Gardens

Team: Cole Moore, Eric Messer, Luke Barber, Philip Entrekin

Work Completed

The team has completed the design review as of the last week of school. This has given us some more information on what to improve upon as we move forward on the project.

Current Completed Deliverables:

- Team Bio's 1/15/23
- Project Summary 1/24/23
- Weekly Progress Report #7 3/09/23
- Proposal Presentation 2/10/23
- Proposal Written Report 2/10/23
- Design Review 3/10/23

Work in Progress

We are currently performing the finishing touches on the software and our bench testing. We plan to have all bench testing finished by April 2nd which is 1 week behind schedule. After this is completed, final assembly of the module will take place.

Milestones We are Working Towards

- Software working smoothly
- Finishing field and bench testing.

Challenges and Changes

We have had some trouble with the software over the last two weeks but now we are making significant progress and everything seems to be working to plan. Some minor bugs and tweaks are all that are left. Testing is behind but will hopefully catch up over the next 2 weeks.

Project Cost

Bill of Materials

C.E.L.P. Gardens	Part Number	Part Description	Retail Price	Vendor	
Hardware	ESP32-S3-DevKitC-1-N8 R8	Microcontroller	\$15.00	mouser.com	
	DHT11	Temp./Humidity Sensor	\$3.15	amazon.com	
	B07SYBSHGX	Moisture Sensor	\$2.00	amazon.com	
	ALAMSCN	Pump	\$2.85	amazon.com	
	COM-08589	Diode	\$0.25	mouser.com	
	Zulkit Waterproof	Device Case	\$4.86	amazon.com	
	SCYarn	Breathable Fabric	\$0.20	amazon.com	
	Alkaline	4x AA Batteries	\$1.81	amazon.com	
	B0858Y4JPL	Battery Holder	\$3.75	amazon.com	
	LAMPVPATH	Micro USB Stopper	\$0.23	amazon.com	
Total			\$34.10		

These components are mostly the final choice for this project. Any small and inexpensive components of the circuit design are not included. Any software used for the project will be free.

Team Member Hours

As of 3/23/23, the team has worked 26.5 hours on this project this week. This is a cumulative of 284.5 total hours invested in the C.E.L.P. Gardens project.

Week E		Mon, Mar 20	Tue, Mar 21	Wed, Mar 22	Thu, Mar 23	Sat, Mar 25	Sun, Mar 26	Total	Year Total
	Cole Moore	2						2	56.5
	Eric Messer	3.5	5					8.5	80.5
	Luke Barber	0.5	2	2	0.5			5	80
	Philip Entrekin		5	6				11	67.5

Group Yearly	
Total	284.5