EE 494 Spring 2023 Professor Dennis Hite

# Weekly Progress Report: #9 30 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. We have finished bench testing and are compiling the data for our future testing.

## **Current Completed Deliverables:**

- Team Bio's 1/15/23
- Project Summary 1/24/23
- Weekly Progress Report #8 3/23/23
- Proposal Presentation 2/10/23
- Proposal Written Report 2/10/23
- Design Review 3/10/23

#### **Work in Progress**

We are behind on our environment and field testing but plan to be caught up by the end of next week. We are going to assemble all of our parts for the module this week for the environment testing.

## Milestones We are Working Towards

- Full assembly of module
- Finishing environment and field testing
- Final Presentation/Poster/Newsletter/etc.

#### **Challenges and Changes**

We had some inconsistency with our soil testing but have gotten more consistent results over the course of our testing. The soil testing method was changed slightly to have more consistent results.

## **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 3/30/23, the team has worked 18 hours on this project this week. This is a cumulative of 350 total hours invested in the C.E.L.P. Gardens project.

Week Eric		Mon, Mar 27	Tue, Mar 28	Wed, Mar 29	Thu, Mar 30	Sat, Apr 01	Sun, Apr 02	Total	Year Total
	Cole Moore			3				3	70.5
	Eric Messer	6		3				9	110.5
	Luke Barber		0.5	2.5				3	89.5
	Philip Entrekin			3				3	79.5

Group Yearly	
Total	350