
Weekly Progress Report: #3

9 February, 2023

Project: C.E.L.P. Gardens

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

Work Completed

The team has completed the hardware list. We have also ordered some of the hardware for the first prototype. The power problem has been decided by going with (2) 9V batteries for our system.

Current Completed Deliverables:

- Team Bio's, 1/15/23
- Project Summary 1/24/23
- Weekly Progress Report #2 1/26/23

Work in Progress

The team is almost done with the Written Project Proposal and Proposal presentation - we plan to finish by 2/9. We plan to finish ordering the parts by the end of this week.

Milestones We are Working Towards

- Project proposal presentation
- Written project proposal
- Getting the final pieces of hardware ordered so that software development may begin

Challenges and Changes

The development board changed as we needed a more inexpensive way to power our sensors and I/O configurations along with built in bluetooth capabilities. The light sensor has been removed due to the team seeing it as unnecessary.

Project Cost

Bill of Materials

C.E.L.P. Gardens	Part Number	Part Description	Retail Price	Vendor
Hardware	ESP32-C3-DEVKITC-02U	Microcontroller	$9.80	digikey.com
	DHT11	Temp./Humidity Sensor	$3.15	amazon.com
	B07SYBSHGX	Moisture Sensor	$2.00	amazon.com
	Adafruit-997	Solenoid Valve	$6.95	adafruit.com
	COM-08589	Diode	$0.25	mouser.com
	L7805CV	Voltage Regulator	$0.69	digikey.com
	BS170	MOSFET	$0.44	newark.com
	3D-Printed	Threading Adapter/Spout	$1.70	coreprototyping.xyz
	B07W9H8M3Z	Device Case	$2.20	amazon.com
	Alkaline	2x 9V Batteries	$4.84	amazon.com
Total			**$33.76 (current)**	

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 2/09/23, the team has worked 34.5 hours on this project this week. This is a cumulative of 109 total hours invested in the C.E.L.P. Gardens project.

		Mon, Feb 06	Tue, Feb 07	Wed, Feb 08	Thu, Feb 09	Fri, Feb 10	Sat, Feb 11	Sun, Feb 12	Total	Year Total
Week 5	Cole Moore	3.5		3.5					7	24.5
	Eric Messer	3.5		4.5					8	26.5
	Luke Barber	5		3					8	31.5
	Philip Entrekin	7		4.5					11.5	26.5

Group Yearly Total	109