



Clean H₂O 2 GO

Project 1: Portable Water Filtration System(human power)

Sponsor: Vu Ly

Apr 5, 2022

1 Team Formation

1.1 Introduction

This document is meant to keep the team members responsible and accountable for their part of the group project. By explicitly writing down our roles and what we want to accomplish, this will serve as our reminder during the duration of the project to always communicate with each other and contribute to the group. We hope to successfully finish this project without any conflicts and issues.

1.2 Team Name

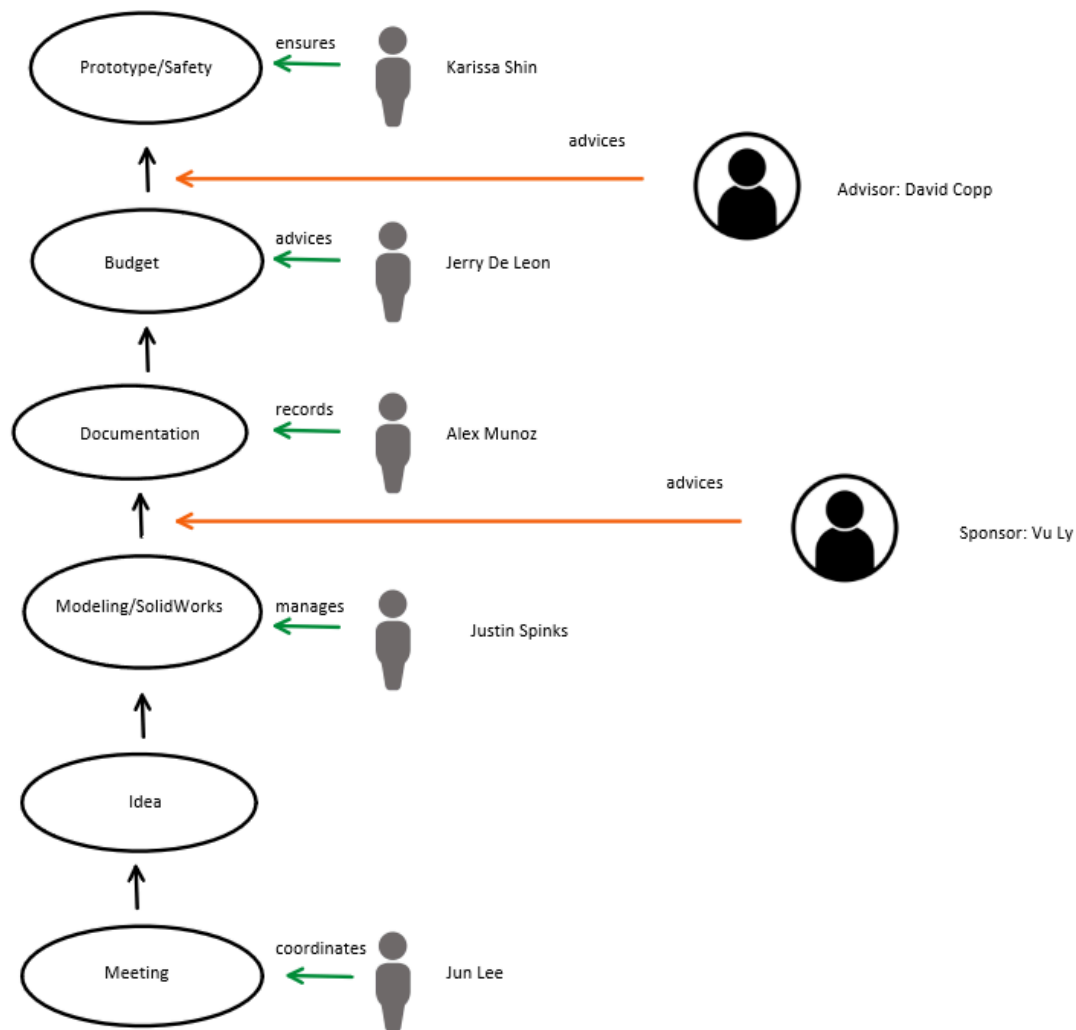
Our team name is “Clean H2O 2 GO “. Our team name was selected as our common interest in portability, and cleaning water brought our team together. The name is appropriate to the concept, or goal of our team project as portability, and functionality of water filtration are factors we are working to achieve.

1.3 Team Goal

The final goal of this capstone project is to create, and build actual prototypes of human powered portable water filtration systems. To achieve the final goal, Solidworks 3-D modeling is required to build, and analyze the work of the filtration system. Then, we will purchase the components for assembling. In the end, our team will compare the result between two systems, one is human powered and the other is electric powered by the end of spring quarter.

1.4 Organizational (Org) Chart

Name	Roles
Justin Spinks	Solidworks Design
Karissa Shin	Safety Officer
Jerry De Leon	Budget Manager/Coordinator
Jun Lee	Meeting Coordinator
Alex Munoz	Documentation Coordinator



1.5 Identify Support Structure and Available Resources

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Budget: \$160 per student, \$800 total

Faculty: David Copp, MAE staff (Darwin and Moses)

Equipment: FabWorks (3D printing, laser cutting), lab rooms (drill press, hand saws, hand tools)

Vendors: Amazon, Home Depot, Target, McMaster

Software: Solidworks, Discord, Zoom, Gmail, Google Drive, When2Meet, Canvas, Ed discussion

Facilities: Library meeting rooms, Lab rooms

Water Filters: Mechanical, Absorption, Sequestration, Ion Exchange, Reverse Osmosis

1.6 Team Communication Plan

Our team will utilize Discord, and Zoom to communicate via text and voice calls. In addition, we will have regular in person meetings on Monday from 6:30 -7:30 starting week 3. Individual group meetups will vary per week.

Contact Information:

- Vu Ly: qvly@uci.edu
- Jun Lee: junwool@uci.edu
- Justin Spinks: jspinks@uci.edu
- Alex Munoz: alexm6@uci.edu
- Karissa Shin: karissss@uci.edu
- Jerry Leon: jddeleon@uci.edu

1.7 Team Contract

- **Diligence** - All team members are expected to contribute to the project consistently in a meaningful manner
- **Respect:** All team members must ensure a respectful and open working environment. Respect everyone's opinions and no personal attacks, or negative comments/attitude will be tolerated.
- **Integrity** - All team members are expected to be honest and responsible about their work progress in order to not hinder the progress of the overall project.
- **Professionalism** - All team members are required to act professionally in meetings, on communication

Team members must also adhere to the rules below:

- **Meetings:** All team members must attend at least ONE meeting per week, and on time. Meetings will be recorded on Zoom for members who are unable to attend. Each meeting will have a PowerPoint presentation that outlines the goals and objectives of each meeting, along with the status reports of each member. Meeting minutes will also be taken by one team member, and each team member will be required to take meeting minutes at least once. Our meeting times are as follows: Saturdays from 12-1, Wednesdays from 5-6, and Thursdays from 1-2.
- **Status Reports:** All team members are required to submit one PowerPoint slide for each team meeting in order to show their progress on their tasks.

- **Budget:** All team members will communicate properly within themselves and with the sponsor to ensure proper use of materials for both a financial and environmental conscious goal in mind.
- **Deadlines:** All team members must complete assigned tasks on time, as noted in the work chart.
- **Communication:** All team members must actively communicate with the team. Any delays/absence in deadlines must be communicated at least 1 day in advance.
- **Decision Making:** All team members will meet through discord or zoom to agree how the project will be completed.
- **Consequences:** If for any reason some negative action/behavior by a team member occurs, the rest of the team members will address the issue during a team meeting. Should the issue continue, the instructional team will be contacted to discuss the situation.

Our team will follow the five stages of team development which are forming, storming, norming, performing, and adjourning. In the forming stage we look to introduce ourselves and set communications with one another. In the storming stage this is where we set boundary rules and learn to understand each other when dealing with a problem. In the norming stage this is where we start to build up trust and collaborate with one another in getting the job done. In the performing stage this is where we show our collaborative teamwork skills and problem solving efficiency. In the adjourning stage is where we come collectively when the project is nearing its end and evaluating the results with the design we made. This process of team development is such a crucial part in an engineering design project because it increases our performance output as a group. The collaborative work we do as a group teaches us the fundamentals of engineering design and process. It shows that the individual work we do contributes to the overall success of the project and how we support one another in the process. Our big challenge will come in the forming and storming stages as we are returning to a project class that may still be in person for the first time in close to 2 years. It will be necessary for us to trust one another and follow the rules and guidelines we have set for team conduct so that we can enter the norming and performing stages quicker and more efficiently. Our adjourning will likely be the least problematic phase, as the majority of our team is upperclassmen and has begun to accept the ritual phases of change that come with moving from project to project.

Consequences and follow up procedures when conflict arises:

When negative actions or inactions of group members occur it is imperative to reach out to the instructors. Some examples that would cause this to happen would be that team members don't communicate, no participation in the project, doing minimal or insufficient work, etc. Once all team members verify that there are internal issues in the group, one member should email the

instructors about the situation as soon as possible. It is in the best interest of the group to resolve these issues before contacting the instructors first.

1.8 Roster and Signatures

Name	Phone	UCInetID	Major	Class*	Signature
Jerry De Leon	760-855-4165	jddeleon	ME	189	Jerry De Leon
Jun Lee	626-899-3212	junwool	ME	189	Jun Lee
Justin Spinks	530-60-59029	JSPINKS	ME	189	Justin Spinks
Alex Munoz	805-843-6387	alexm6	ME	189	Alex Munoz
Karissa Shin	949-241-0805	karissss	ME	189	Karissa Shin

Sponsor/Advisor: Vu Ly

Signature: Vu Ly

Date: 04/05/2022