

What were the outcomes of the prior phase?

1. What did I plan to do?
I planned to have our customer requirements, engineering requirements, and problem statements set. Have at least 3 different ideas for the actual design of the system. That includes having materials, pumps, budget, dimensions, and a CAD design all figured out. The plan was far too accelerated and skipped a lot of important steps in between.
2. What did I actually do?
I managed to learn the basic levels of aquaponics and create our initial plans for the course. We finished our problem definition stage, completed customer/engineering requirements, brainstormed risk management, benchmarked our concepts against other concepts out there.
3. What did I learn? How were plan and reality different?
Plans were way too optimistic and liberal with the timeline. There were many other questions and concerns that needed to be addressed before the actual design part was feasible. I also learned that I don't have as much free time as I would like to have. Managing my time and setting realistic goals is better than overreaching and under delivering.

Team level goal for next phase

In systems design, our team expects that through the completion of various methodologies including functional analysis, morphological analysis, concept generation, and selection, we will be able to successfully define the architecture and interface of our system in order to satisfy the requirements previously defined by our customer in the problem definition phase.

What do I plan on doing to ensure that my team has a successful review at the end of the next phase?

1. Visit the Webster High School to take a tour of their existing aquaponics system (3 hours, Thursday 9/19)
2. Research methods to siphon water uphill (2 hours, Saturday 9/21)
3. Look at different materials and dimensions for plant bed and water tank for Kesh to design CAD drawing (2 hours Saturday 9/29)
4. Determine how to lower the cost of the existing sensor system to collect data more effectively (3 hours work with Armand Thursday 10/3)
5. Develop a plan for an electric/power free pump that will allow for water to continuously cycle through the system. (2 hours Saturday 10/5)

What is standing in my way of meeting my next phase goals?

Lack of proper time management is my biggest problem. I am often dedicated to a task until I am overwhelmed with other tasks at hand that have a more immediate deadline. Also, without proper

equipment to test with, it's hard to come up with concepts that will guarantee to work. I don't want to waste our budget and time with any setbacks that I'm in charge of. I will definitely need to watch a lot of Youtube videos and read a lot more sources just to educate myself further on this topic. It will also help after visiting the Webster High School aquaponics system to ask questions on what I don't know so I won't be ignorant.

Note to teams: Consider using an abbreviated form of this for your daily/weekly check-ins with your team and/or guide, similar to an Agile standup:

- What have I done since the last class to move the team toward its phase goals?
- What do I plan to do next to move the team toward its phase goals?
- What blockers are preventing me from getting my work done?