Team: P20762 **Engineer: Melissa Valdez**

What were the outcomes of the prior phase?

1. What did I plan to do?
    a. Research oxygen/nitrogen cycle and drip rate needed for optimal fish vitality
    b. Set up peer evaluations
    c. Become familiar with current system
2. What did I actually do?
    a. Set up peer evaluations
    b. Organize feedback from guide and customer
    c. Research similar aquaponics systems
    d. Work on documentation needed for EDGE
3. What did I learn? How were plan and reality different?

I learned that working on documentation and fully understanding the requirements for the project took much longer than anticipated. I was under the assumption that whatever was included in the PRP was what we had to work with, but it was the opposite. The needs for the project aren't exactly black and white, and it was imperative to get as much feedback from the customer, guide, and previous team members as possible. As a team, our plan was to begin collecting data from the current system as soon as possible. However, in reality, we had little knowledge on the current sensor system to analyze data and had to focus on documentation.

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. Each team member should estimate 5-10 specific tasks that he or she will complete.

a. Research parameters (pH, temperature, oxygen) needed for fish vitality

b. Assist in sensor work and data collection

c. Research cycling rates for fish vitality

d. Ensure everyone has an opinion on important design matters (such as sealant material or pump change)

e. Facilitate processes by organizing with team what each member plans to have done, and to ensure that they have it done by a certain date

f. Help in any system design, when possible

2. When will each task take place? Does sequencing matter?

Data collection from the sensors and research have to be done before any purchasing is made. Facilitating processes and making sure everyone's voice is heard will be done consistently throughout MSD. Sequencing is important because if no research is done beforehand, frivolous purchases can be made.

3. Estimate the amount of time each task will take – ensure that you are not committing yourself to do 80 hours of critical-path work alone during the next three weeks.

a. Research cycling rates and parameters needed for fish vitality (2 hours, Saturday 9/21)

b. Assist in sensor work and data collection (1 hour, After Tuesday/Thursday class, with team)

c. Understand and assist in system design (Create schedule with team)

4. How do other team member tasks impact my task completion, and vice-versa?

Before any data collection and sensor work can be done, team members in charge of the sensor need to understand how it functions. Also, in order for me to facilitate processes, team member must be able to cooperate with me on due dates. My tasks, such as researching fish vitality, will effect team members who are working on the pump and physical cycling of water.

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

Other responsibilities, unfamiliarity with the system, and team time constraints may be obstacles that prevent me from achieving my next phase goals.

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?