Removal of a team member

Losing a member of the team would be a setback for the project, so it is best to avoid this if possible. However, depending on the issues that arise, it might be a necessary action to ensure the continued progress of the project. The first step is to establish communication with the teammate in question. If any member of the team has a complaint about another team member, all team members should know about it.

It is important to meet and discuss why the rest of the team feels a certain member is lacking and allow them another chance to improve if possible. If the team member in question continues their previous behavior, then it would be justified to discuss with Professor Healy the options going forward which include removal of the member.

Some problems that might constitute removal includes consistently missing deadlines without cause, multiple unexcused meeting absences, consistently poor communication that inconveniences the team, severe internal conflict between two or more members, or otherwise hindering the project's completion.

Habitual absences from meetings

Meetings are a good time for the team to get a lot of work done efficiently. If a team member continually misses meeting times, it can hamper progress on the project. It is important to consider that problems in life can arise at any time and detract from schoolwork, so missing meetings with a valid reason is acceptable if it isn't a common occurrence. However, the outcome is different if the meeting is missed without communicating the reason with the rest of the team. If three meetings are missed without a valid reason, the team should discuss with that member that they are missing too many meetings and allow them the opportunity to attend every meeting going forward. If five meetings or more are missed without a valid reason, the team will explain the situation to Professor Healy and discuss possibly removing the team member depending on the circumstances.

Missing a deadline for ordering parts

Hayden and Zak will manage the ordering of parts. This will prevent confusion across the team regarding who is ordering what parts and allow Hayden and Zak to check in with each other on the status of which parts have been or are currently being ordered. Missing an ordering deadline could happen for many reasons, and the first step is to inform the rest of the group. If the manufacturer is out of stock or stops selling a product, the team will research other distributors of that part to order it from another place. The consequence for the manufacturer or retailer, in this case, is that they lose a potential customer. In the case that the part cannot be found anywhere, the team will have to decide on a suitable alternative to order instead. If either Hayden or Zak misses a deadline by simply not ordering a part, the responsibility of ordering parts will be shifted to the person who didn't miss the deadline and the team will discuss what can be done while the part is being shipped.

Parts don't arrive by the scheduled arrival date

If a part doesn't arrive on time, there are two possible outcomes: the part is on the way but is just late, or there is no way for the part to arrive relatively quickly. If the part is simply late but will still arrive within a reasonable time (within a two weeks), the team will work on another portion of the project while the part is being shipped. If it turns out that there is no way for the part to arrive before it's too late, the team will have to discuss alternative parts to use and/or places to order from; This potentially includes changing the design of the entire circuit and schematics if an entirely different part has to be used. Since the source for our parts are United States based retailers, and we are ordering parts the week after finals week, this leaves plenty of time for parts to arrive before we need them.

Module Schematic Delay

A delay with a schematic won't be detrimental to the project. If the schematic is partially complete, work can still begin referencing the partial schematic. If the schematic hasn't been started at all, then that is a separate issue with the team member(s) responsible for that task. If someone else needs to take over

developing the schematic, then we as a team can facilitate that responsibility shift. There is no set individual to help with assisting others in completing their assigned tasks.

Module Hardware and Software Delay

Since different people are testing different modules, a delay with testing or implementing them won't be extremely detrimental to our timeline. We are set to finish most testing by the middle of the winter term, giving us a five-week buffer to account for any possible delays in testing. If the schematics are bad, this will be discovered during testing of the respective module, and since 2 team members are assigned to each module, one or both members can work on revising the schematic and the other can continue testing (if applicable). We are purchasing extra parts as extra in case of part failures. We have backup parts available for most components except the wall-wart (which can be Amazon Prime 2-day shipped to us if it fails.) If the plan for our circuit is bad, then there are multiple resources we can take advantage of to debug the issue. This includes testing equipment in Purvine, talking with Professor Drouant, Professor Klopf, or any other faculty or online resources to find the problem. Given the large range of expertise from the professors in the CSET department, any software issues we have there are professors that specialize in those areas. And, given that we are using the Arduino IDE and its libraries, there are many online resources as well.

Module Integration Delay

We plan to integrate the modules as we test them, this means if problems arise, all the team members responsible for the modules being tested and integrated are present. This allows for on-the-fly debugging for all appropriate modules and allows for faster integration since we don't need to find time for the people responsible for working on the modules to be present. If something goes wrong, we have built-in dead space to account for the event. Given there will always be multiple people working on a module, if they need help there will be others present to assist them, or within reach on Discord. The only module

this isn't true for is the local host website, which is why we allotted plenty of time to allow James the opportunity to reach out to as many people and resources as possible.

Annotation of Delays

Since the Gantt chart was developed in Excel, adding or editing entries is easy. To signify a delay, the bar color will be changed to red. After the task is finished, the color will be reverted to orange, and an additional entry will be added directly under the original which will indicate the actual time the task took.

Firing your professor

Under the rare circumstances that Professor Healy hinders the success of the project, the team should first inform him of the problem. A conversation must be had on why the team feels Mr. Healy is a hindrance to the project as he may not be aware and allow for a discussion of potential solutions. If issues persist, the team can then choose to work more closely with another professor that is familiar with the subject or continue to work with Mr. Healy but seek minimal advice in the areas that created conflict.