

## **Timeline with Milestones and Fallback Plan for Project Three by Team 5**

Milestones are very important in the development cycle of a project. They represent important stages in the cycle that have been passed. It is also imperative that a group have a fallback plan to rely on in case an unexpected event takes place that delays production and spoils the original plan.

We have divided Project Three into eight separate milestones. Each are listed and discussed in the following sections.

### **Milestone One: Complete Team Organization, Task Allocation, and Timeline**

For milestone one, two items will be completed. First, our group will complete the Team Organization and Task Allocation paper along with the Timeline that is to be turned in Friday, April 14<sup>th</sup>. Working towards the next milestone begins immediately after a milestone is completed.

### **Milestone Two: Complete Conceptual Design**

The item to be completed to reach this milestone is the conceptual design. The design of the project is what both the construction of the robot and the code will be based upon. Working towards milestone three begins as soon as milestone two is reached on Monday, April 15<sup>th</sup>.

### **Milestone Three: Present Prototype Code and Design**

Two days after milestone two has been reached, the code and construction preliminary prototypes will be presented to the team. Prototypes allow for the testing and redesigning of the robot, which will begin immediately.

### **Milestone Four: Finalize Design**

On Friday April 18<sup>th</sup>, the H-team will present the finalized design of the robot. Having a finalized design by this date allows the C-team to test and redesign the code without having to account for unexpected hardware changes.

### **Milestone Five: Finalize Code**

The C-team will present the finalized code on April 21<sup>st</sup>. Although this code will be fine tuned during testing, the lower level functionality will remain the same, allowing the team to focus on the testing phase of the robot.

### **Milestone Six: Complete Code and Design Documentation**

On Tuesday, April 22<sup>nd</sup>, the code and design documentation will be completed. This three day cushion before the documentation will be turned in allows everyone to proof read and correct the documentation.

### **Milestone Seven: Complete Testing**

This milestone ensures that all testing and fine tuning of the robot will be complete before the demonstration. This will be completed by April 24<sup>th</sup>.

### **Milestone Eight: Finalize Documentation and Complete Project**

Milestone eight coincides with the due date of Project Three. On April 30<sup>th</sup>, the entire project will be completed and working flawlessly, and in addition, all the paperwork for Project Three will be proofed and finalized as well.

### **Fallback Plan**

These milestones have been thoroughly thought out and this group believes them to be quite achievable. However, some events may occur that will make meeting these milestone dates very hard or impossible. In the case that a milestone is not met on its given date, all other milestones will remain in place, and the date for the missed milestone will be extended by two days. Also the junior member of the other team will assist the struggling team so the extended milestone date will be met. For example, if the H-team misses a milestone the junior member from C-team, who has experience with hardware, will assist the H-team in meeting the new deadline. Extra work will be done on the project to make up for missing the milestone date, and to ensure that the missed milestone will be reached before the following milestone needs to be met. A milestone date will never be changed unless that milestone has already been missed. For example, if milestone two is missed, milestone three's date will not be changed unless its date is also missed. However, this is highly unlikely because our group will put in extra work to make sure the missed milestone is reached before the next milestone arrives. If the same milestone is missed twice, an emergency meeting will be held to assess the situation and to take the appropriate actions needed to complete the milestone. And in the case that a missed milestone causes the next milestone to be missed as well, the first missed milestone must be completed before work on the following milestone will begin.

### Timeline with Milestones

