Timeline and Fallback Plan

Project 3

Team 3

Mark Branson Amit Mathur Matt Roman Mike Taylor

Project 3 Milestones

- **Brainstorming** Initial group meetings to discuss the basic strategy we will employ to accomplish the task at hand. This is where the most wide reaching decisions about how the robot will look are formed, and this is where we decide on which sensors we will use and how we will use them.
- **Robot Construction** This is where the body of the actual robot will be constructed and sensors applied.
- **Testing Phase I-** This is the first of several testing phases. This test will involve just the hardware and will focus on making sure all motors and sensors are behaving as they should. The handyboard will be mounted and all sensors will hopefully be in their final position.
- **Software Composition I-** Initial code used to achieve the goals. This code should be functional enough to test the major components and should be able to accomplish simple tasks.
- **Testing Phase II** This phase will actually test to make sure that the software designed in the previous step actually makes the hardware behave as it should.
- **Software Composition II** All separate modules constructed in the previous composition step must be combined and the robot should be able to autonomously accomplish the primary task.
- **Testing Phase III-** Complete robot with what we desire to be final code and final sensor configuration will be run on the test course to assure it is able to successfully accomplish the given goal.
- **Final Analysis** Construction of the final reports including software and hardware designs. This will be graded by other teams and the robot will be shown in our big final demonstration to Dr. Hougen.

The dates for completion of these tasks is below:

| Milestone | Due date |
|---------------------------|------------|
| | |
| Brainstorming | April 14th |
| Robot Construction | April 18th |
| Test I | April 19th |
| Software I | April 19th |
| Test II | April 20th |
| Software II | April 23rd |
| Test III | April 23rd |
| Final Analysis | April 24th |

Fallback Plan

The two main tasks of this project are hardware and software. If either of these two tasks fails at all, the other will be ruined. Thus, we must ensure that they both move in parallel. To this end, we have one expert assigned to each of these major tasks, but we also have two backup people ready to add their work to the completion of these tasks. If any task slips from the deadline, we have padded in an extra day for emergency's sake. Our experience has shown that one day is enough for our group.