

Group 2-Timeline with Milestones & Fallback Plan – Project # 1

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A. Overview

The Project # 1 will last in the duration of January 30th, 2004, to February 18th, 2004. Milestones for the project shall mainly be in guideline with due dates assigned by Dr. Dean Hougen as well as internal deadlines set by the team. Milestones set by the team will also reflect the different phases of the project. To ensure of a timely and qualitative project completion, each team member will be responsible for ensuring that he understands the primary importance of meeting each milestone as appropriate. Additionally, all team members will hold each other accountable. To make the plan time-prone , a fall-back plan is also devised.

B. Milestones

The layout for the first project will consist of six major milestones – planning, design of robot, construction of robot , coding, debugging, demonstration, and documentation. To ensure that there are minimum reworks and setbacks, the team will spend a great amount of time in the design phase so that less time will be required during the remaining phases, particularly the debugging /testing phase.

2.1 Planning (January 30)

The first milestone for the project will be designing the team organization and authorizing a time line/deadline. Here, tasks and subtasks will be identified and suitable team member possessing the related skill will be allotted the work accordingly.

2.2 Design (February 1)

A sturdy and feasible design is “the” essential need of the project success. Hence the first and foremost hurdle to clear in the project lifespan is to finalize on a concrete and subtle robot design /architecture. As all the other stages of the project depend solely on timely completion of design , at no cost should this milestone be missed. To ensure the same , we have devised a scheme of a main robot designer (Prateek Duggal) and secondary robot designers (Kumaresh Rajan and Jonathan Siegel) .

2.3 Code (February 6)

The code milestone requires the implementation of the robot’s artificial intelligence in Interactive C. As like the design, this phase will be completed by two members, apart from the rest of the team. The coding is divided in to two parts viz. Velocity control and turning code. Once again, the code must be finalized and ready for testing by February 6.

2.4 Construction (February 8)

Here also the concept of Main and Secondary Designer is adopted. In case Prateek is not been able to complete the design on his own , he will be supported by secondary team members . The construction milestone will be complete as pre-designed in the team's design stage.

2.5 Test (February 9-12)

This stage is kept to ensure that once the robot is built and code being written , the robot should comply to the specification or standards allocated in the project sheet. The robot will be subjected to physical tests and code will be tested. As Dr.Hougen has set the demonstration dates at February 13th, the team should by any means will have to complete testing by February 12th. Round the clock effort will have to be employed by members to make sure of meeting this milestone.

2.6 Demonstration (February 13-16)

The team will present the robot and its code with desired movement to Dr. Hougen and the class on 13th/16th February . Dr.Hougen shall decide on the feasibility /accuracy of the robot.

2.7 Documentation & Presentation (February 16)

Once the robot is tested and completely approved, the team members will start towards inking down the complete elaboration of the robot design, construction and tests carried out in a report format. The final report is due 16th February. However the emphasis should be to complete it before the deadline.

Apart from this , the team will pen down and prepare a 15-20 minute speech to be given in the class highlighting the salient points of the design and construction.

P.S: Some of the ideas behind this paper is taken from Submission of Project # 2 by Group # 4 for the Spring '03 class of Introduction to intelligent robotics. Given at the link <http://www.cs.ou.edu/~hougen/classes/Spring2003/Robotics/materials/project2/team04/Milestones.pdf>.