
Timeline with Milestones & Fallback Plan

Group 9 – Project 3 – 13 April 2003
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Tasks to be Accomplished:

The tasks are as follows (*in rough chronological order*):

- Team Organization and Task Allocation Document*
- Timeline with Milestones and Fallback Plan*
- Hardware Design (*group meeting*)
- Chassis Construction
- Software Design (*group meeting*)
- Software Construction
- Testing (*group meeting*)
- Demonstration
- Presentation
- Robot Code & Documentation*
- Robot Design Documentation*
- Team Organization Evaluation*
- Final Report*
- Peer Reviews (*individual*)
- Team to team review forms (*individual*)
- Project 1 presentation review form (*individual*)

**Also includes electronic submissions of these documents*

Timeline/Milestones for Tasks:

- **13 April 2003** – Team Organization Document, Timeline Document completed
- **14 April 2003** – Team Organization Document, Timeline with Milestones and Fallback Plan due
- **15 April 2003** – Hardware Design & Construction Meeting
- **17 April 2003** – Software Design & Pseudocode Meeting
- **18 April 2003** – Completion of Hardware
- **21 April 2003** – Completion of Software, Software Debugging, Software Testing
- **22 April 2003** – Software/Hardware Integration Testing in Robotics Lab
- **23 April 2003** – Software/Hardware Integration Testing in Robotics Lab
- **24 April 2003** – Software/Hardware Integration Testing in Robotics Lab completed
- **25 April 2003** – Project 2 Demonstrations
- **28 April 2003** – Project 2 Demonstrations
- **29 April 2003** – Robot Design Report completed
- **29 April 2003** – Software Code/Design/Documentation Report completed
- **29 April 2003** – Final Report completed
- **30 April 2003** – Final Report, Robot Design Report, Software Code Report due
- **30 April 2003** – Presentations
- **02 May 2003** – Presentations
- **01 May 2003** – Team Organization Evaluation and Plans Report completed
- **02 May 2003** – Team Organization Evaluation and Plans Report due

**Denotes Critical Milestone*

Description of Important Milestones:

15 April 2003 – By the end of this meeting, the hardware design and hardware approach should be finalized. The hardware will then be built and put into working order over the week, so that integration with the software can begin.

17 April 2003 – By the end of this group meeting, the general architecture of the software, and pseudocode down to the individual methods should be completed. This information gives the coder a very good idea of how to frame his project.

18 April 2003 – The hardware should be completed and ready for software.

21 April 2003 – The software should be completed and ready for testing and integration.

24 April 2003 – By this date, the software and hardware should be successfully integrated, and the project ready for demonstration.

29 April 2003 – Final Report should be completed and ready to submit by this date.

Fallback Plan:

In the event that one or more milestones is not accomplished on time, the group will immediately meet to discuss and come up with a specific course of action tailored to the exact situation faced. Ideally, each team member has enough experience to know if they will not be able to meet the deadline date for their particular task, and contact the rest of the group so that the problem can be fixed before it becomes critical. This policy of prevention is actually the primary fallback plan. The lines of communication will be kept **very** clear, so that the slightest difficulty and/or delay will be promptly reported and assistance will be rendered by one or more teammates until the problem is resolved. Based upon experiences in project 1 and project 2, the primary difficulty was found to be in the software fine-tuning, and in the hardware/software integration. The end of the semester limits the number of days we have to test the hardware/software integration in the Robotics laboratory, that is why as much time as possible is given to the coder to write, debug, and conduct in-house testing of his code before we test in the Robotics Laboratory.

In the event of a complete hardware failure, the senior hardware team member will step in to correct the problem. In the event of a complete software failure, the senior software team member will step in to correct the problem. Minor problems with the hardware and software will be addressed by whichever team member is most able to solve the problem. In the event that a piece of documentation will not be completed on time, then the other team members will be notified, and whichever team member has the greatest amount of free time that day will complete the documentation. If a group meeting has to be cancelled, it will not be cancelled until an alternate time and location is established. If the entire agenda for a group meeting is not accomplished at that meeting, that meeting will not be adjourned until a second meeting time and place has been established. **All reports and documentation will be presented to the other members of the group at least 24 hours prior to its due date so that all members have time to review and comment upon the documents.** This helps insure a high standard of quality in our reports and documentation.

CRITICAL MILESTONES FALLBACK PLAN:

The following timeline presents a tentative fallback plan for the critical milestones marked above:

- **15 April 2003** – Hardware Design & Construction Meeting [**FINAL DESIGN NOT REACHED**]
- **16 April 2003** – [**Emergency Hardware Design Meeting**]
- **17 April 2003** – Software Design & Pseudocode Meeting [**FINAL DESIGN NOT REACHED**]
- **18 April 2003** – [**Emergency Software Design Meeting**]
- **19 April 2003** – [**Emergency Software Design Meeting**]
- **21 April 2003** – Completion of Software, Software Debugging, Software Testing [**CODING NOT COMPLETED**]
- **22 March 2003** – [**Emergency Coding Session **don't leave until it's done****]
- **24 March 2003** – Software/Hardware Integration Testing in Robotics Lab [**NOT COMPLETED**]
- **25 March 2003** – [**Stay until Dr. Hougen kicks us out**]
- **29 March 2003** – Final Report completed [**FINAL REPORT NOT COMPLETED**]

- **29 April 2003 – [Team members with any amount of free time crank out the needed reports]**