ECE 2799 - Homework 3 Outline

Problem - Define Project Milestones

For your project define all the tasks that need to be completed, including achieving a working prototype that you can demonstrate and preparation of your final presentation. Once you have all the tasks identified, with sufficient detail, prepare a Gantt chart indicating when and for how long each of your tasks will take. Also indicate who is responsible for each of the tasks. Hint: don't forget some contingency, since things usually do not go as originally planned.

What is expected?

Homework 3 requires you to write a short report. The report must be well-written, logically organized and must contain a sufficient amount of detail that the reader has confidence in your conclusions. You can plan on receiving a bad grade for a report that is written poorly, not spell checked, or incomplete. If you have difficulty writing, please see the instructors, tutors, or the WPI Writing Center for help.

To complete this assignment, your report must contain:

Your project schedule - This schedule should be in the form of a Gantt chart (you can do this using a drawing package, Microsoft Project or numerous shareware software products on the net). The schedule should contain:

- All of the tasks you must complete
- Major milestones (accomplishments)
- Dates for all milestones and tasks

Descriptions of all tasks - You must provide brief descriptions for each task on your Gantt chart which describe each task including:

- Research Tasks
- Design Tasks (both hardware and software)
- Experimental Tasks
- Building and Troubleshooting Tasks
- Test and Verification Tasks
- Tasks pertaining to final presentation and report

Schedule and milestones for each task - For every task, you must disclose:

- Who is responsible
- Who is involved (1 and 2 are different things!)
- How long it will take
- When it will occur
- What happens if you are off-schedule (contingency plans)

The Gantt Chart - A properly constructed Gantt chart will:

- Display all tasks and the person responsible for the task (there can only be **one** responsible person)
- Display tasks flowing from top left to bottom right
- Identify which tasks and/or dates are milestones

Other tips:

- Make sure that you make room for some buffer time; things are bound to go wrong and you don't want these problems to force you off schedule.
- If things do go wrong, explain what you will do to stay on schedule.
- Make sure that your final schedule is reasonable. Everyone should have work to do at any given time.
- You should arrange things in a way that avoids one or more people sitting around waiting for something to happen. There is plenty to do -- the people in a team MUST be working in parallel!

Sample Outline

1. Introduction
   a. Introduce the reader to the purpose of this report.
   b. Provide a brief summary of the "bottom line" of your conclusions.

2. Your Gantt Chart
   a. Provide the top-level Gantt chart of your project.
   b. Discuss the overall project schedule and any items on the schedule for which you anticipate delays.
   c. Present any contingency plans for handling delays.
   d. Discuss why the individuals responsible for a task were chosen.

3. Task-specific Gantt Charts (one chart per top-level task)
   a. Explain the top-level task.
   b. Explain any risk items.
   c. Disclose the person working on each sub-task.
   d. Define major milestones and dates.
   e. Present contingency plans.

4. Conclusion
   a. What is the current status of your project?
   b. Are there any milestones that are in danger of being missed?
   c. What efforts are being made to avoid missing milestones?

Keep in mind

Neatness counts. Your reports should look like something you would be proud to show to your boss. There should be no hand-drawn figures, no spelling errors, and no grammar errors. Title pages should contain the names of the team members and their EE mailbox numbers, the project name, and the team number. If you include material from journals or other sources they should be referenced in the text and included in a "references" section at the end of the report. Copies of your spreadsheets or collected data should be summarized in the report and included in an appendix to the report.