Progress Reports Guidelines

Introduction

The Progress Reports are to show (with indications of proof) a snapshot of where the project is at the time the reports were prepared, and to inform the reader of the changes that have taken place since the Proposal. The reports consist of one team report (the Team Progress Report), and individual reports from each team member (the Individual Progress Reports).

In the Progress Reports your writing should be concise, and you should use bulleted lists, tables, and figures where possible to keep the documents short, yet informative.

Document Format

See the general Document Guideline. A reminder that figures and diagrams are NOT included in the target section lengths.

The following sections are expected in the Team Progress Report:

- Cover page (team identification, project title, date, etc.)
- Table of Contents
- Project Overview (target 2 pages)
- Team Progress Summary (target 1 page, max. 3 pages)
- References
- Appendix A: Gantt or other scheduling charts (Current + that from Proposal)
- Appendix B: Updated copy of the Test Document (including information about any completed tests)
- Additional Appendices (max. 15 pages)

The Individual Progress Report will contain the following sections in the order given below.

- Cover page (1 page)
- Executive Summary (1 page)
- Body, consisting of:
  - Individual Progress and Contributions
  - Information on individual milestones
  - Conclusion / Progress Assessment
- References
- Additional Appendices (max. 15 pages)

Your Supervisor will also be submitting a grade and individual evaluation on your progress in the same timeframe that this report is due. You will be evaluated on progress, team interactions and individual work, including time management skills, problem-solving ability, communication skills and effort.
Sample Progress Reports

Click here for some sample progress report outlines. These examples are drawn from past student reports, and illustrate how the general guidelines can be applied to a variety of design projects. The technical details have been removed in order to highlight the report structure and organization as opposed to the technical content or writing style. NOTE: The format follows a previous style where there was no team document.

Specific Section Details: Team Document

Project Overview

The intent of this section is to re-introduce the reader to the project. It may be largely crafted from previous work if the project has not changed much from the proposal, although it may contain details of decisions made since the proposal. As it will set the stage for your progress descriptions, you might also want to include information about the main design challenges of your project. It must at least create the stage for the individual reports so the relevance of the individual work is apparent.

It is expected that details pertinent to the individual progress will be in the documents from those individuals.

If it makes sense, combine this section with the team progress summary. This section should NOT be as detailed as in your Proposal, and may use your Proposal as a reference.

Team Progress Summary

This section summarizes what has been done since the last report. It is written by the team and can be used as a reference in each team member’s individual report.

This section should contain the following items:

- A summary of the project goal and of any changes to the goal or requirements since the design review. A system-level diagram is often helpful. Be brief here since you will also provide an up-to-date copy of the Test Document containing these items as Appendix B.
- A summary of the team’s progress. Highlight a few key accomplishments since the design review. Briefly describe some of the key challenges that were encountered and some of the key decisions that were made in this time. Is the team on schedule? Make explicit reference to the milestones on the original Gantt chart from the Project Proposal.
- The key responsibilities of each team member since the design review. One or two items for each member is sufficient, and can be general areas instead of tasks.
- A summary of any changes to the team work plan, individual responsibilities, or the project milestones. It is not expected that your plan will evolve exactly as you first predicted. Again, be brief here since you will provide the details in individual reports.

Appendix A: Gantt Charts or Timeline information

Provide an updated version of the Gantt chart or timeline information plus a copy of the previous version from the Project Proposal. Each Gantt chart should be presented on a separate sheets, they
should fit onto 1 or 2 pages, and must cover the entire project cycle (i.e., from Sept. to April). The updated version should show progress and any changes.

**A note about the WBS:** An updated Work Breakdown Structure (WBS) table can also be included if you feel it necessary (e.g., if major revisions were made to the original work plan). Ensure the task titles and task numbers are consistent across this appendix.

**Appendix B: Test Document**

Insert a copy of the updated Test Document that you first produced in the Project Proposal. If there are any changes, highlight them here, and briefly justify the changes in the body of your document.

**Additional Appendices (max. 15 pages)**

Place in the additional appendices all other information does not fit the flow of the document. Some information is bulky and only summaries or snapshots will go in the main part of the document. Some background information may be required to bring the reader up to speed, but will be overly long or unsuitable for the main part of the document (which should still contain a summary of this background). There should be one Appendix for each subject and each Appendix should have a title and letter (e.g., C, D, ...). Remember to provide captions for tables and figures. Each appendix must be referred to by its letter within the body of the Progress Report, and only include material appropriate to that reference.

**Specific Section Details: Individual Document**

**Individual Progress and Contributions / Information on Individual Milestones**

This is the main part of the individual progress report where you highlight your personal contributions to the overall project. Keep your writing concise, and focus on what was actually accomplished. If your progress is below your expectations, avoid the temptation to pad this section or to digress back into professing the intrinsic virtues of your project. Instead, write about what needs to be done to get your project back on track.

You may want to have general descriptive text followed by treatment of the individual milestones.

Typically, the emphasis is on the work you’ve done since the design review. However, since this is the only individual report in the course, you may also highlight your contributions made prior to this. If you are limited by the report length, summarize your earlier contributions in this section and place all the detailed documentation of your earlier work in the appendix.

Typical information to include:

- Overview information that helps the reader appreciate the significance of your tasks to the overall project.
- A summary table of your individual tasks or milestones for this reporting period. Report only on your work; if you have significant contributions in a task assigned to another team member, try to subdivide the original task into distinct portions which each of you can separately claim responsibility for (e.g., split 'Design of X' into 'Design of X' and 'Testing of X'). The table should have the following headings:
<table>
<thead>
<tr>
<th>Task #</th>
<th>Task Title</th>
<th>Category</th>
<th>Status</th>
<th>Old completion date</th>
<th>New completion date</th>
</tr>
</thead>
</table>

- The ‘Task #’ and ‘Task title’ should be taken directly from the updated Gantt chart or timeline in Appendix A.
- ‘Category’: Choose from ‘Old’, ‘New’, or ‘Modified’. Indicate ‘New’ if this task did not appear in the original Gantt chart from the Project Proposal. Indicate ‘Modified’ if the task was included in the original Gantt chart, but has since changed in nature or should be renamed. For tasks listed as ‘Modified’, also indicate under ‘Task title’ the previous title used.
- ‘Status’: Choose from 'Completed', 'Delayed', 'In progress', or 'Cancelled'. A delayed milestone is one that should have been completed by now, whereas a milestone that is ‘In progress’ is not yet completed but on schedule.
- ‘Old completion date’: For ‘old’ tasks, specify the original expected completion date. Leave blank for new tasks.
- ‘New completion date’: For completed tasks, record the date of completion. If the task is ‘in progress’ or ‘delayed’ put down the expected completion date.

- Provide a brief report for each individual task listed in the above table. For tasks that have been cancelled entirely, a brief justification is required. An example format for reporting tasks and an example of a complete and incomplete task can be found at the end of this document. A blank template can be found [here](#).

Some comments when reporting on tasks:

- You must provide sufficient and adequate documentation in order to substantiate your claims of completing or progressing on a task. Each task should be verifiable, and have some tangible result or milestone associated with it. Examples include:
  - a circuit schematic
  - a completed test plan document
  - key decisions from a research study (rather than simply saying that you studied something)
  - experimental or simulation results
  - For software, source code listings and class descriptions are sometimes useful but do little to show the work involved or that software actually works. Provide actual samples of the outputs of your program where possible, particularly those resulting from module tests. Also for larger programs provide documentation such as a functional specification, pseudo-code, state diagram, or flow chart. **Note that failure to reference what code you copied from other sources, or modified and used is plagiarism and an academic offence. You must indicate what you developed from scratch and what is from outside sources.** Any software without any indication of source will be assumed not be yours for marking purposes.

Summarize the key significance or results from the documentation you’ve provided and attach the actual detailed documentation into the appendix where this is practical. For longer items, such as program listings, only include excerpts.
o **Actions vs. Decisions:** make a clear distinction between Actions and Decisions.

**Actions** focus on the activity that went behind the decisions. What alternatives did you explore? How did you compare the alternatives? How did you overcome any challenges?

**Decisions** result from the actions. Which of the competing solutions did you choose? Did you decide to change a milestone? Add further testing? Do further investigation? For each decision, provide a sentence or two to justify it.

**A note on changing tasks and milestones:** Some teams do not develop an adequate work plan as part of their Project Proposal and thus find themselves in a dilemma when they submit their progress report because the milestones no longer make sense. Under these circumstances, the students may choose to make substantial changes to the Work Plan and Gantt chart. This is acceptable, but students must provide adequate justification: it is not acceptable to change a project because you haven’t worked hard enough and now want to make it easier. Some examples of common problems and the questions you should ask yourself:

<table>
<thead>
<tr>
<th><strong>A Problem</strong></th>
<th><strong>A Solution</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Have one milestone under which group members performed similar work but because the milestones were poorly worded or devised, the students got themselves into a trap (ownership of a task is murky)</td>
<td>If prime ownership for the milestone has changed, this should be noted. Group members doing work for the milestone should indicate what work they have performed. If the milestone was badly devised, it should be revised and/or split as appropriate.</td>
</tr>
<tr>
<td>Current milestone has an inappropriate title and should have been reworded or broken into subtasks</td>
<td>Note changes and do it right.</td>
</tr>
<tr>
<td>Unforeseen problems took place that were beyond the control of a team member (unrecognized risk)</td>
<td>Report activity under current status and discuss the problems in the context of decisions made. Show changes to work plan, divisions of responsibility and any new identified risk. Risk analysis is an ongoing &quot;moving target&quot; that is finished only when the project is finished</td>
</tr>
</tbody>
</table>

**Conclusion / Progress Assessment**

Conclude the document by briefly summarizing the current status of your individual work and of the overall project and give the reader a sense of whether or not the project is on track and the expected final outcome of the project. Provide a balanced assessment that is positive, yet honest.

**Additional Appendices (max. 15 pages)**

See Team Progress Report section for details.
Guidelines and Examples for Reporting on Tasks in ‘Individual Progress and Contributions’ Section

These examples give ideas of how you might present each milestone worked on in the reporting period. Sections can be expanded as necessary. The examples that follow give a general idea of what to do, although you may have to adapt them to your specific circumstances.

Definitions:

Actions: Actions are tasks accomplished with credible evidence to support your claims (i.e. screen shot, code fragment, the key result of a mathematical derivation, a schematic, a layout, etc.)

Decision: Tasks that progress in sequence as planned are actions and not decisions. Decisions are made if you reach a junction where two or more options are possible or if a risk that had not been considered suddenly arises. A decision must include the following information:

- Why did the problem/issue arise?
- What options did you consider?
- On what grounds was a particular option/decision chosen/made?

Note: If you use the template below, be sure to wipe out the text instructions!
<table>
<thead>
<tr>
<th>Task # &amp; Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>• <strong>Description</strong> (if task title is insufficient):</td>
</tr>
<tr>
<td>• <strong>Category</strong>: Old/New/Modified</td>
</tr>
<tr>
<td>• <strong>Old Completion Date</strong>:</td>
</tr>
<tr>
<td>• <strong>Date completed or New Completion Date (if changed)</strong>:</td>
</tr>
<tr>
<td><strong>Responsibility</strong>: Your name, (also specify those who assisted in this task)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Status at start of reporting period:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Technical status, schedule status, cost (if applicable or relevant)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Status at end of reporting period: Completed/Delayed/In Progress/Cancelled</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Technical status, schedule status, cost (if applicable or relevant)</td>
</tr>
<tr>
<td>• If not yet completed, a brief sentence describing what remains to be done</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>• describe your significant actions during the reporting period and include sufficient evidence to substantiate your work (i.e. a schematic diagram, a code fragment,…). Include only highlights here and place more detailed documentation in the Appendix.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Decisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>• describe the decisions made specifically in meeting your milestone and what consequences these decisions are expected to cause</td>
</tr>
<tr>
<td>• indicate whether other milestones were affected</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Testing &amp; Verification, Final Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>• State what testing was planned and done in the reporting period and how these results compared to the targeted performance (any detailed technical discussion goes in an appendix)</td>
</tr>
<tr>
<td>• Highlight the final results produced upon the completion of this task. Provide sufficient evidence to substantiate your claims (Again, place only the highlights here. Detailed evidence should be placed in the Appendix).</td>
</tr>
</tbody>
</table>
Example 1: Completed Milestone

<table>
<thead>
<tr>
<th>Task 1: Interface control board to PC.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description:</strong> Program written to use serial link on the microcontroller and tested using ‘kermit’ on the PC.</td>
</tr>
<tr>
<td><strong>Category:</strong> Old</td>
</tr>
<tr>
<td><strong>Old Completion Date:</strong> Jan 15</td>
</tr>
<tr>
<td><strong>Completion Date:</strong> Jan 12</td>
</tr>
<tr>
<td><strong>Responsibility:</strong> Jane Doe (John Smith assisted with the testing)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Status at start of reporting period:</th>
<th>Not started.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status at end of reporting period:</td>
<td>Completed.</td>
</tr>
</tbody>
</table>

**Actions:**
Code for the serial link was found on the manufacturer’s website [2]. This was converted into an interrupt service routine, and a 500-entry buffer was added. The converted code is found in Appendix D and the revised algorithm is shown in Fig 7.

<< diagram here >>

**Fig 7: Flowchart of Serial Interrupt Service Routine**

**Decisions:**
Two decisions were made to meet the goal of main microprocessor routine time independence. Because some of the algorithms executed by the microprocessor could span many serial inputs, I decided to use an interrupt and to use buffering to acquire the inputs and to hold them until they were used. This permitted the achievement of time independence for the main processor with no impacts on the performance of other elements.
Testing & Verification, Final Results

Four tests were done to verify the correctness of the code. On the PC side, in all cases, the free program ‘Kermit’[3] was used to monitor the output from the microcontroller and to supply input to the microcontroller over the serial link connecting the two.

1. **General Test.** Single characters were sent in both directions and checked using the debug monitor on the microcontroller and Kermit on the PC. Sample output from Kermit shown in Appendix D, Fig. D.2.

2. **Microprocessor Output Test.** A small program was written to output a string of characters at full speed to the PC. These were verified.

3. **Microprocessor Input Test.** Kermit was used to send a file of characters to the microcontroller at full speed. These were verified using the debug monitor (Appendix D, Fig. D.3).

4. **Echo Test.** A program was written for the microprocessor to remove input characters from the buffer and echo them to the PC. These were checked against the original in the PC (Appendix D, Fig. D.4).

**Final Results:** The program successfully passed all four tests, and key results are documented in Appendix D.
## Example 2: Incomplete Milestone

**Task 3: Establish interconnection with card reader.**

- **Category:** Old
- **Old Completion Date:** Feb. 16
- **New Completion Date:** Feb. 28

**Responsibility:** John Smith (Some background research assistance by Jane Doe)

**Status at start of reporting period:** Background information was being explored in preparation to proposing a solution to the problem.

**Status at end of reporting period:** Delayed

- Communication had not yet been established in a way that is error free. Some data interchange had been done.
- Further development needed, followed by testing & verification.

**Actions**

We decided to take a new approach in solving this problem.

The device has been physically connected to the PC and appears to be operating correctly.

The device must be sent an initialization code by the processor, and then codes that will allow access to the card information. After many attempts I was able to produce an initialization sequence that invoked a response from the device, however the data that was sent from the device did not seem to follow the format suggested by the device specifications (See Appendix E for sample output).

**Decisions**

We are proceeding on two fronts. I am going to work on the idea that the information we received from the device was correct, but bit-shifted or in inverse order to what we are expecting. My teammate, Jane, will be contacting the manufacturer’s representatives to see if we can obtain more information or sample code.

**Testing & Verification of Progress**

Since full communication has not been established, full testing has not been started. Testing is a separate task under the responsibility of Jane Doe (Task #7, originally due Feb. 28, but now also delayed).