Guidelines for Reporting Laboratory Work

CMPE-100, Winter 2003, Laboratory
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Modified version, originally written by S. C. Petersen

Unless explicitly told to do otherwise in the lab assignment you are expected to write your lab report in your engineering notebook. The ODD pages are for your own scribbles and notes, the EVEN pages are for the reporting. On the EVEN pages you are expected to use ink, no pencil is allowed. Using different colors is encouraged. Please refer to the Guidelines for Engineering Notes available on the class website for more information on note taking.

Reports will emphasize experimental work and concisely summarize that work through a discursive reporting style that expresses your individual grasp and understanding. This will normally consist of the following items:

1. A cover page with the usual information: Lab number; experiment title; class; student's name; instructor's name; start date. If you worked with a second student, you should note your partner's name also.

2. The report itself, consisting of an orienting introduction describing the lab, the body and conclusion(s). These sections should be titles: Description, Results, and Conclusion. Feel free to add section under each of these major heads as needed.

3. Supporting material such as schematics, timing diagrams, etc. to be labeled and referenced in the report.

Each student must individually prepare their own reports in their own lab notebook, which must be organized, neat and legible. Each report should be complete, thorough, understandable and literate. You may use a concise summary style with clear discussions included where necessary. Key your major block headings to correlate with the system used in the lab assignment. There is no minimum length requirement; Introduce the lab generally and, where applicable, for each task specifically. You should include a well-drawn and labeled engineering schematic (not a wiring diagram) for each significant circuit investigated. This can be a print out taped in the lab notebook, again on EVEN pages. Scope and depth of what you report on depends on what you were asked to do, learn or become familiar with.

Documentation:

Use good drafting practice when producing figures, graphs, drawings or schematics and label them for easy reference.

You may use the Xilinx Schematic Editor to prepare schematics, or they may be drawn by hand. They should always be labeled and referenced in your report. Graphics requiring drawn, straight lines should be done with a straight-edge where possible (resistors for
example can be drawn freehand). Well-drawn free-hand sketches are permissible for schematics, but a template is encouraged, especially for bodies like logic symbols (typically 1/2 or 3/8 scale).

Space must be provided in the flow of your discussion for any tables or figures. Reports are much easier to read and follow when done this way. Do not collect figures and drawings in a single page at the end of the report.

**Notes on style and perspective:**

Remember, you are reporting on something done in the past. Therefore, most of what you write will be expressed in the past tense. To aid you in resolving questions about tenses, the following summary should be helpful:

1. Experimental facts should always be given in the past tense.
2. Discussions or remarks about the presentation of data should mainly be in the present tense.
3. Discussions of results can be in both the present and past tenses, shifting back and forth from experimental facts to the presentation.
4. Any specific conclusions or deductions should be expressed in the past tense, general truths in the present tense.

Grading will be based on completeness, clarity, understanding and justification of results along with a successful demonstration of the lab work.