Addendum # 4
Guidelines to the Project Report

1. Motivation:

Your report contributes 25% to your Project grade. More importantly, it is your chance to “leave a lasting impression” as we do archive outstanding reports. Like any good technical writing, the report should be brief, to-the-point and well organized. Please note that “aesthetics” of the report (laser printing, glossy papers, ring binding, fancy clip arts, color pictures, ...) are not important. The report should be done professionally, nonetheless.

2. Format of the Report:

Your report should be no longer than 5 pages, excluding the Verilog codes and waveforms. Here we are giving you some guidelines as to how you should organize your report on a technical paper format. You may include or exclude a section based on your particular project.

I. Title:

This should be the title (or cover) page of your report. Give the title of the project, names and majors of the group members and course/semester in which you did the project.

II. Abstract (3-5 sentences):

This part is the summary of your report and represents the main idea of your work. Basically, after reading this section, the reader should develop a reasonable understanding of your design and its possible application.

III. Introduction and Background (3-5 sentences):

This part is mainly about previous and related works; for example, you can refer to your homework or lab experiments, which you used as a reference in your project.

IV: The Design (500-1000 words):

This is the body of your report, so it should be well-written. Keep in mind that you will be explaining your design in detail during your Project Presentation so you can skip some of the details in your report. Generally, this section should have explanation of the following items:

(A) User Interface: In this segment you will explain the user interface of your design, i.e., what are the significant inputs and outputs and their respective functions.

(B) Block-level description of your implementation: Make use of figures to explain your design at a functional-block level. For example, you can use a block representing a 4-bit adder or a 3x8 decoder, etc.
(C) **Explanation of the state machine:** Provide a complete description of your state machine. Draw the states and all the transitions. Because this is one of the most important parts of the design, explain it very carefully.

**V. Test methodology (100-300 words):**

Testing and verification is one of the most important steps in digital design. In this segment you should explain how you tested your design to verify that it works fine. Explain any corner case input patterns and how your circuit responded to those inputs.

Waveforms of simulation result and your command files can be part of this segment.

**VI. Conclusion and Future Work (100-300 words):**

In this part you might suggest some extension and enhancement to this design that future EE 201L students can make. Note that these proposed enhancements should be simple enough for 201 students to implement in their semester-end projects. Finally, this is your chance to comment on your experiences during the course of the semester - mention things that you liked or disliked, labs that you enjoyed or suffered or experiments that you thought were boring. Most importantly, give us your suggestions on how we can improve this course, especially the lab part.