ECE5725 Lab reports

Each Lab requires a written report. As with all assignments in the class, there will be one lab report per group. The report is due at the beginning of the NEXT lab session, once the lab is completed. A pdf of the lab report should be uploaded to Canvas. Due dates will also be mentioned in class and posted on Canvas.

Sections of the Lab report should include the following:

- Cover Page: Includes Lab number, Lab section, date, names and netids of teammates

- Introduction: Short description of what was done in the lab

- Design and Testing: Include design steps involved in the lab and describe your progress in each of the lab sections (for example, in Lab1, describe how the Linux kernel was installed and modified to include the piTFT). Please include any issues you experienced as well as well as smooth progress in the various sections of the lab. Describe testing you performed to confirm that steps of the lab worked as planned.

  Results should also be discussed in this section.
  - Did everything perform as planned?
  - Did your team meet the goals outlined in the lab description?
  - Did you complete each week's checkout on time?

- Conclusions: What worked and what didn't work during the lab? Were there any issues you experienced during the lab? Are there any improvements you would suggest? Were there any items that could be clearer in the lab description? What insights were gained during the lab; were there any surprising results that you may not have expected?

- Code: Each code module should include a header with the names and netids of each team member, Lab assignment number, and date. Clear comments in the code are essential. There are two methods for including code in the report:
  - Required: Code modules should also be uploaded into a directory to the ece5725-s21 server. All code should be placed in a directory named: Section_netid_LabN, where:
    - Section = M, W, or Th corresponding to your lab section
    - netid = netids of team members,
    - N = lab number.
  - This directory should be created in the /home/LabN directory.
  - Optional: Code may also be included in a Code Appendix in your report.

- General:
    - Please include a cover page as the first page of your lab report
    - Please indicate all team members, net IDs and which lab section you attend
    - Please remember to include page numbers in your report
    - Please upload code to the server (and indicate where it is in your lab report). Code listings in an Appendix are optional.
    - Please remember to include code headers and extensive comments in your code
    - Generally, Lab reports should be within the range of 7 to 10 pages, including all text and figures (not including the optional code appendix). This is a rough guideline.

Please plan to include drawings, tables, screenshots, and photos in all sections to support your work. The report should be written and supported with visual elements so that a first-time reader can follow and understand the work you accomplished.

Lab evaluation guidelines

Lab reports will be evaluated using the following elements as outlined in the above document. These evaluations will be applied to each task description in the report. The Benchmark column describes minimum report requirements. Generally, the elements in the Advanced column build on and include all elements of previous sections. The Advanced column describes well written report elements.

	Advanced			**Benchmark**
Design, Testing, Results	Design, Testing and Results described including the path to development. Description would allow someone new to this task to implement it with success. Lab insights clearly explained.	Design-to-results path clearly elaborated. Some lab insights noted. Testing results expanded	Design and results include development decisions. Limited testing described	Design and results stated
Code	Code comments expand understanding of basic code.	Code includes expanded comments, clear formatting to assist readability. Code snips included in text to illustrate design details	Code includes headers and some comments	Basic, functional code included
Graphics	Graphics included to support each complex element. Graphics clearly labeled, include all data and easy to interpret, adding understanding to a clear text description.	Graphics included for most complex elements	Graphics included for some complex elements	Limited graphics
Readability and Formatting	Well written descriptions trace the path through problem, implementation and solution	Descriptions include additional detail.	Descriptions expanded to highlight some details	Correct spelling and formatting, limited, terse descriptions. Page numbers and cover sheet. Team member names and Lab section
References	Fully formatted references following posted guidelines.	References include both links and text documents used to complete the work.	Expanded references with some expansion on link references	Limited links to sites