ECE:4880, Principles of ECE Design
Laboratory Report Requirements

Each team must submit a written Lab Report consisting of the following sections:

1. **Design Documentation**

   This section of the report should describe the hardware and software design of your system. The documentation should include, as relevant to the design:

   - A discussion of important considerations and/or design tradeoffs involved in reaching the final design.
   - A block diagram, or other system-level view of the design, along with a textual explanation of the overall function of the system.
   - Schematic(s) for hardware aspects of the system, accompanied by a parts list for any components that are not fully specified on the schematic. Schematics should show component values for discrete parts, and pin numbers for ICs. Each schematic should be accompanied by a textual description that summarizes the circuit's operation.
   - Flowchart(s), pseudocode, or other appropriate descriptions of software/firmware aspects of the system, along with a descriptive overview that summarizes its operation.
   - Pictures or drawings of all user-interfaces, with textual explanations where needed to explain their function/operation.
   - Pictures and/or diagrams describing any significant physical aspects of your system—e.g. enclosure, connectors, etc.
   - All software/firmware source code should be submitted in a separate zip file.

   Diagrams, schematics, etc. should be neat, and legible. Hand-drawn figures should be avoided.

2. **Project Retrospective**

   This section of the document should include:

   - A summary of the role that each team member played in the completion of the lab.
   - A critical assessment of the degree of success achieved by the lab team
   - A discussion of any factors that contributed to less-than-complete success in meeting the lab goals and an explanation for how the team will mitigate these factors in the future.

3. **Test Report**

   The Test Report should be a table or list that describes a set measurements and/or tests conducted to verify that the completed prototype meets all requirements and constraints. Each entry in the test plan should specify an objective test conducted on the system and the pass/fail outcome of the test. If the test is a measurement, the result should include both the measured value and an indication of whether it falls in the acceptable range. More details regarding testing and the test report will be provided in Lecture.