

Final Project – Due 12/7/17

Project

Your goal is to create a product or project that builds on the knowledge you have gained in class. You will create or recreate a fully functional product that displays some of the aspects of our class including series and parallel circuit design with respect to understanding components. Your entire project will be released as an open source module. Once you create the BOM and schematics, you will produce a fully functional PCB and enclosure that fits the need of the project.

Documentation

Throughout this process you will document your development of your project. This will include:

- Introduction to your idea and a justification of its need.
- Bill of materials (sent by 11/9/17)
- Schematics and datasheets that support your project.
- An outline of your build in journal format.
- Pictures/videos of your product throughout stages of development and prototype.
- A finalized, working PCB with components soldered. We will use laser cutter and solder mask to finalize.
- An enclosure to protect the electronics and fit your intended project.
- Results of any testing or surveying. What iterations did you need to make based on human feedback?
- All BOM, schematics, PCB, and enclosure design files will be combined and released as a project with your documentation so that anyone could recreate your project.
- A conclusion of your findings.

Presentation

We will present our projects on the final exam day. This is a requirement for all students. You will include your rationale for development and thoughts throughout the project. Please include results of any testing or surveys you used throughout. This should be a professional presentation defending your choice of project and the results. The presentation should be around 10 minutes.