

# Final Project – Due 12/5/17

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## Project

You are going to use your working knowledge and documentation of the current mechatronic system to devise an upgrade, modification, or solution that creates a stronger system. You will create a prototype of your modification to prove theory. We will present our ideas and justification during the final exam. Please have your idea solidified by the end of class on 11/21/17.

## 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.
- Schematics and datasheets that support your project.
- A revised flow chart of the station you are choosing
- An outline of your build in journal format.
- Pictures/videos of your product throughout stages of development and prototype.
- A working model or prototype of the theory of your application.
- Results of any testing or surveying. What iterations did you need to make based on human feedback? How does your prototype affect the entire system?
- Prototype of the ladder logic or Arduino code.
- All BOM, schematics, flowcharts, and design files will be combined in a package.
- 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 4-6 minutes.