Deliverable #6a: Final Report

1 Objectives

This deliverable will allow you to report on the final status of your project, the challenges you faced, and the things that changed from your proposal at the beginning of the semester. This is also a chance to have a say in the future of this class; by telling me things you struggled with during the semester, offering ideas about future course topics, and providing feedback on anything from scheduling, assignments, EAGLE, microcontrollers, etc.

You will prepare a document [3–5 pages in length, single column, 10–12pt font, 1 inch margins] including all of the above.

2 Final Report Details

To get full credit, you must include the following sections in your document:

Project Summary: This section should be on the first page. This short (around 100 words) paragraph should concisely describe the goal of your system as of now, with minimal implementation details. This can be adapted from your original proposal.

Project Description and Implementation: This section is where you will describe the actual system implementation, with as many implementation details as possible. Throughout this description, don’t just tell me what you did. It should be clear why you did what you did. You must include sub-sections for each of the following, in the order defined below:

1. Changes: describe the changes you made from initial proposal.
2. Software: describe the implementation details of the software that runs your device, with emphasis on the firmware you developed that runs on your microcontroller(s).
3. Hardware: describe the components that make up your final project board.

4. Prototype pictures: include one or more pictures of your device. This should include a picture of your board—the one generated by OSH park and/or a photo of the assembled board. Include other pictures, as appropriate, to provide clarity.

5. Challenges: describe the most challenging part(s) of your specific project (finding project specific parts, soldering small components, software design, etc). Describe how your team addressed these challenges.

6. Team coordination: describe how your team coordinated your efforts. Did team members have specific roles? Were there any coordination challenges?

Resources: This section is where you list and describe the code libraries, tutorials, and other resources you used or adopted for your project. For each resource, you should describe how you adapted it to your project.

Class Feedback: In this section, answer three questions about the class this semester.

1. What was the most challenging part of this class?
2. What would you like to see added or changed in future semesters?
3. What general comments do you have about the class?

3 Collaboration

The class project is a group project. Your team should only submit a single report to handin, that should include all team members and their email addresses at the top of the report.

4 Submission Instructions

This deliverable is due by 4:00 PM on April 30th. Late assignments will not be accepted. Submit your document via handin.cs.clemson.edu. Do not email me your document.
You must name your document `finalreport.pdf`. The names and email addresses of all team members (in ascending alphabetic order by last name) should be listed at the top of the document, as well as your team name. The document should be in PDF form, no other format will be accepted.

## 5 Grading

This deliverable is worth 20% of your final class grade. Table 1 shows the rubric that you will be graded against.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Pts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Names, Emails, &amp; Title</td>
<td>Included at the top of the first page. 100 words or less. High level description.</td>
<td>5</td>
</tr>
<tr>
<td>Project Summary</td>
<td>Correct sub-sections. Correct order. Sufficient detail. It is clear what you did and why.</td>
<td>20</td>
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<tr>
<td>Project Impl</td>
<td>One paragraph per question. Thoughtful responses.</td>
<td>40</td>
</tr>
<tr>
<td>Class Feedback</td>
<td>Resources listed, code made available on buffet. All members contributing.</td>
<td>10</td>
</tr>
<tr>
<td>Resources</td>
<td>Grammar, sentence structure, clarity, organization, spelling.</td>
<td>15</td>
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<tr>
<td>Style</td>
<td></td>
<td>10</td>
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