

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. **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 on your microcontroller.
3. Hardware: describe the components that make up your final project board.

4. Board Picture: include a picture of your board, the one generated by OSH park.
5. Challenges: describe the most challenging part of your specific project (finding project specific parts, soldering small components, software design, etc).

Resources: This section is where you list the code libraries, tutorials, and other resources you used or adopted for your project. **Additionally provide a link to the public git repository on buffet.cs.clemson.edu where all your project EAGLE files, and code, are stored.**

Class Feedback: In this section, answer three questions about the class this semester, take about a paragraph for each.

1. What was the most challenging part of this class?
2. What would you have liked to see added to this class?
3. Free response on the class in general.

3 Collaboration

The class project is **not** a group project, students will be graded individually based on what they submit, build, test, and finally, demo. All projects must meet the individual requirements listed. However, if you are interested in collaborating with others on a project together, that is fine. Just remember you are responsible for your own grade, so organize appropriately. Make sure your hardware / software / firmware does not depend on someone else's. If you choose to collaborate with others on a larger project, your part must still be able to independently demo a working system that is microcontroller driven, with your own custom software and custom PCB, that includes a radio component, an analog component, and a visual component.

4 Submission Instructions

This deliverable is due by 11:59 PM on December 9th. Absolutely no late assignments will be accepted.

You will have an opportunity to check your grade by sending me the document via email, two days or more before the submission deadline. I will provide feedback on what you need to get 100%. This is offered as a courtesy. **Note that even if you fix things mentioned you are NOT guaranteed 100% because I may miss something. Strive for excellence.**

Submit your document via **handin.cs.clemson.edu**. Do not email me your document. You must name your document [your username].pdf, replacing [your username] with your Clemson username.

The document should be in PDF form, no other format will be accepted. Make sure to submit your document using **handin**.

5 Grading

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

Table 1: Grading Rubric for System Description

Item	Description	Pts
<i>Name & Title</i>	Make sure both are included on the first page.	5
<i>Project Summary</i>	100 words or less. High level description.	20
<i>Project Impl</i>	Correct sub-sections. Correct order. Sufficient detail.	40
<i>Class Feedback</i>	One paragraph per question.	10
<i>Resources</i>	Resources listed, code made available on buffet.	15
<i>Style</i>	Grammar, sentence structure, clarity, organization, spelling.	10

If the document is not turned in on time, or it's not a PDF you will get a 0%.