ENGR 103: Engineering Design Lab III
Final Report and Presentation Instructions

Final Report Content

The final report should be a standalone document outlining the activities and progress of your group during the spring term.

Page Limit: 8 pages, not including title page
Due Date: Start of week 10 lab period, Bb Learn assignment dropbox
File Format: PDF Document
File Naming Convention: engr103_grpXXXYY_finRep.pdf (XXX is lab section, YY is group number)

The report must contain the following components, subject to the discretion of your group's advisor.

1. **Title Page:** First page of your document which contains the title of your project, your group ID, your group members, and the name(s) of your advisor(s). This page should be unnumbered.
2. **Abstract:** Also contained on the first page of your document, underneath the required title page information as listed previously. ***The abstract should give a general overview of your group's project – the design problem, existing solutions, your final design, and the results of implementation -- and not exceed 250 words and should fit on the cover page.***
3. **Introduction:** Second page of your report. ***Numbering begins on this page at "1".*** This section should be similar to the introduction written for your design proposal. Specifically, it should contain the following elements.
   a. ***Problem Overview:*** Describe the problem and audience addressed by your project. Clearly explain the design constrains and objectives (cost, weight, size, etc).
   b. ***Existing Solutions:*** Describe existing solutions as they pertain to the problem and audience in your problem overview.
   c. ***Project Objective:*** Describe what your project is and how it specifically addresses the problem and audience of your project, and additionally how it is different or is set apart from other pre-existing solutions. Somewhere here, also be sure to state what it the final deliverable(s) is (are) of your project.
4. **Technical Activities:** Describe the main technical activities that were performed over the 10 weeks of the project. This section should form the majority of your report and should contain any relevant drawings, photographs, equations, or simulations produced during the course of the design.
5. **Results:** Describe the final deliverable that your group has produced. Did you meet your initial objective? Describe any testing and evaluation that have been performed on the final deliverable.
6. **Future Work:** Discuss the next steps of you project if you or someone else was tasked with continuing it. Specifically, what additional elements could be incorporated into your group's design in terms of extending the effectiveness of your project? Also, discuss areas which could be improved upon in future designs.
7. **References:** Include all technical references at the end of the report in IEEE formatting style. ***Make sure that you cite your references throughout the report via the IEEE notation system.***

Final Report Formatting Guidelines

In grading your report, the following components will be considered in addition to all technical requirements.

1. **Spelling/Grammar:** Reports should be noticeable proofread with no punctuation errors, written in third person passive voice.
2. **Logical Continuity:** Reports should have a logical continuity about them, and understandable by a general level, educated audience. Specifically, technical concepts must be properly introduced to your reader before you begin discussing them.
3. **Figure Formatting:** All figures must be captioned and referenced in the text where applicable. Use captions labels of either "Table" or "Figure".
4. **Page Formatting:** The page formatting used by your group should be consistent throughout the entire report. The page following the title page should be numbered "1".

Final Presentation Guidelines

The final presentation will take place during week 10 in a departmental conference room during the time of your groups associated lab section. The content of the presentation should be based on final report, excluding an abstract.

Presentation Time: 10 minutes with 2-3 minutes of Q&A (includes setup and demonstration of project).
Slide Due Date: Upload slides to BbLearn lab section prior to your presentation.
File Naming Convention: engr103_grpXXXYY_finPres.ppt (XXX is lab section, YY is group number).

In addition to the above, the final presentation should also contain the following formatting elements, subject to the discretion of your group's advisor.

1. **Title Slide:** First slide of your presentation, containing the title of your project, your group ID, your group members, and the name(s) of your advisor(s).
2. **Presentation Outline:** Second slide of your presentation, outlining your presentation. You should also highlight which group members will be speaking at which points of the presentation.
3. **Slide Numbering:** Every slide of your presentation should be numbered and also include the total number of slides.
4. **Questions Slide:** At the end of your presentation, include a slide which formally ends the presentation and instructs the audience that you are ready to field questions.
5. **References Slide:** After your questions slide, include your references in IEEE format.

Keep in mind that the final presentations will be open to the general public and occurring during the same time as senior project presentations. ***Therefore, please be sure that you dress and present yourself professionally***.