ENR 161 Spring 2020

Design Project Final Oral Report

Presentations Begin Promptly at the Start of your ENR161 Final Exam Period!

# General Information:

## Time Restrictions

10 minutes per team for presentation

5 minutes per team for questions and answers

## Attendance:

All students must **arrive at least 10 minutes prior to the start of the exam period** and remain until the last presentation is completed. A penalty will be incurred for those arriving late or leaving early.

## Member Contributions:

Each team member is expected to speak for approximately the same amount of time. A penalty will be incurred for students who do not adequately contribute to the presentation.

## Required Content:

1. **Introduction**
   1. **Attention Getter**

Keep in mind that everyone has the same project, you don’t want to be in the group that starts off the same exact way every other team does. Try to say something to get the room’s attention but also relate it to your project. Blurting out random obnoxious statements may grab attention but it won’t keep them attentive.

* 1. **Introduce Your Team**
  2. **Presentation Outline**

Include a slide that covers an outline of what you will be discussing. You shouldn’t read it word for word during the presentation but do discuss a brief overview of your intended presentation topics.

1. **Problem Definition**

Explain the problem that your team solved and the technical challenges that it presented. Try to give detail relating to real life rather than, we designed a robot that could navigate a track… Instead, explain the real world problem and how your robot would solve this problem if it were designed to perform in this real life scenario.

*Hint:* You may have to be creative in coming up with a real world problem your robot is solving.

1. **Software Description** (The most important aspect of your presentation)

For each system task listed below have a slide with a flow chart created and describe how it works.

* 1. Calibration
  2. PID
  3. Line counting
  4. Making turns
  5. Navigation - How do you program the series of events into your robot?

1. **Robot Competition Results**
   1. Create a table showing the points earned by each team in your class section during the in-class robot competition. Highlight your team’s results and use a format similar to that shown below.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Team Name** | **Overall Score** | **Trial 1 Points** | **Trial 2 Points** | **Trial 3 Points** | **Trial 4 Points** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

1. **Project Assessment**

Assess each item listed below as specifically as you can. Avoid generalized statements that provide the reader with generic clichés that add little information. (e.g. We could have done better with more time. We could improve our robot by making it more reliable. There was too much human error.)

* 1. Performance
     1. Compare your robot’s performance with that of other teams.
     2. Describe features from other robots that you would consider using if you were to repeat this project.
     3. Discuss the features that your robot possessed that other teams may wish to borrow from you design.
  2. Team Dynamics
     1. Were all members willing and allowed to fully participate in the design and testing?
     2. What would have helped your team work more effectively together?

1. **Style Elements:** 
   1. **Dress**
      1. Dress as you would for a job interview (slacks, dress shirt, sweater, shoes, etc.)
      2. **Do not wear** T-shirts, jeans, sneakers, sandals, hats, hoodies, outdoor jackets, jerseys or other recreational attire.
   2. **Eye contact and body position**
      1. Never read directly from the slides, bullet points should simply keep you on track
      2. Scan the room and attempt to look at everyone
      3. Face the class when using the overhead
      4. Don’t block the screen
      5. Use a pointer to assist with items iii and iv above
   3. **Voice and Expression**
      1. Speak with sufficient volume
      2. Do not present with anything in your mouth (gum, candy, etc)
      3. Speak with expression and enthusiasm (try to read the audience and adjust your tone)
   4. **Visual Aids**
      1. Write in outline form
      2. **Minimize text on slides** (Again, bullet points should simply keep you on track)
      3. Use background and text colors to maximize contrast
      4. **Images work better than text**
      5. Avoid passing items around the audience, if they’re paying attention to the item, they aren’t paying attention to your presentation.
      6. Test your Presentation in the room you will be presenting in and be prepared with a backup plan if the technical system fails.
   5. **Answers to Questions**
      1. Restate the question if the entire audience may not have heard it.
      2. Answer the question efficiently, don’t ramble on and on. If you need to give more information up front, summarize the answer at the end. “So, to answer your question…”
      3. Be honest if you don’t know the answer, not knowing the answer is not necessarily a problem but do state how you might find the answer. “Intelligence is not the ability to store information, but to know where to find it.” -- Albert Einstein

**ENR 161 Spring 2020**

**Design Project Final Oral Report Grading**

**Names \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Grade \_\_\_\_\_\_\_\_\_\_\_\_**

**Required Elements:**

1. **Introduction** **Max Pts (10) \_\_\_\_\_\_\_\_\_\_\_**

(Attention Getter, Team Intro, Table of Contents Slide)

2. **Problem Definition Max Pts (10) \_\_\_\_\_\_\_\_\_\_\_\_**

(Problem Definition and Challenges Presented)

3. **Flow Charts**  **Max Pts (10) \_\_\_\_\_\_\_\_\_\_\_\_**

(Flow chart for each aspect of the system)

4. **Software Description Max Pts (30) \_\_\_\_\_\_\_\_\_\_\_\_**

(PID, Line Counting, making turns, etc)

5. **Robot Competition Results** **Max Pts (10) \_\_\_\_\_\_\_\_\_\_\_\_**

(Table of Results)

6. **Project Assessment** **Max Pts (10) \_\_\_\_\_\_\_\_\_\_\_\_**

(Performance and Team Dynamics)

7. **Style Max Pts (20) \_\_\_\_\_\_\_\_\_\_\_\_**

(Dress, Eye Contact & Positions, Voice, Visual Aids, Answers to Questions)