

Memorandum

To: Lonny Grafman

From: Ian Simons

Subject: Engineering 215

Date: 5/9/2019

Concessions Cart

Purpose:

In this project, our goal was to build a concessions cart as requested by Zane Middle school. The project was also a means to show and teach us students about how to go about a design project from start to finish, all of the obstacles we would face on even a small scale project such as this, and how to professionally conduct ourselves with each other and our clients.

Discussion:

When we started this project, we had just come off the heels of our last design project, the Rube Goldberg Machine project. This was a much smaller scale project in comparison to this one, but from it, we learned the basics of the design process, and how that process actually plays out. Our groups were chosen for us based on certain criteria we met, not by our choices, and we chose our project from a list of various other projects. We set about contacting the school and our representative for the project, one Danielle Muniz, who showed us student's past efforts to build a concession cart that turned out to be more useful as a swag cart. With this, we were able to establish some basic guidelines about what was needed, the limitations that would be placed on us, and were given some ideas on how to go about making our cart. After that, we started working on the written portion of this process, doing research on methods and materials that we would need to fulfill the requirements of our project. With this knowledge, we were able to then go about gathering materials, and coordinating construction of multiple aspects of the cart. Through this and the design process, there were some feature that we unfortunately had to leave on the drawing table, as they were unfeasible for us to accomplish within the allotted timeframe given to us to complete the project, and they were not absolutely critical to the function of the cart. In the end, we completed our project and presented it to the school.

Conclusion:

This project was about making a product to help in our community, but it goes beyond that. This was about teaching us the engineering design process, methods, and preparing us for both the potential pitfalls we could wind up dealing with, and teaching us how to deal with those sections of the project that don't exactly fall within the engineering framework of the

project itself, but instead deal with how to show and market a product to people, as well as remaining within the ethical bounds we hold as engineers.