Developing a Mechanically Correct Golf Swing Trainer

Overview
In today’s world research has been conducted and observed that when increasing or decreasing one’s moment of inertia (by 10-12%) of a baseball bat it will increase swing velocity. But no one has been able to prove this with golf. This year, SPHERE’s Consulting LLC gave the task of developing a golf swing trainer that tests exactly that.

Objectives
Some of the objectives for this product included developing a computer model as well as a working prototype. Along with this, the prototype had to maintain safety and be relatively easy to use.

Approach
- Brainstorm ideas by looking up previous products and existing patents
- Gather customer needs through various conversations with sponsor and other golfers
- Develop an AHP matrix for concept generation and concept selection
- Run through various prototypes seeing what golfers and sponsor liked and disliked about them.
- Develop a CAD model on the final prototype
- Manufacture and test the final prototype
- Use the results and graph them to observe the data obtained
- Analyze what went well with the prototype and what could be improved upon

Outcomes
- As a result from this project, the sponsor will save $243 of the $1000 budget that was given. With mass production, this product will have the chance of costing even less.
- Manufacturing and Production times can be reduced to a 9-hour workday once being mass-produced and an expert in the craft. Also, doing everything at once for the project will cut time and money.
- The current prototype is merely a prototype. In the future it is expected to change the means of how the weights are attached to the prototype in order to further increase safety.