

# Race Car

Connor Smith

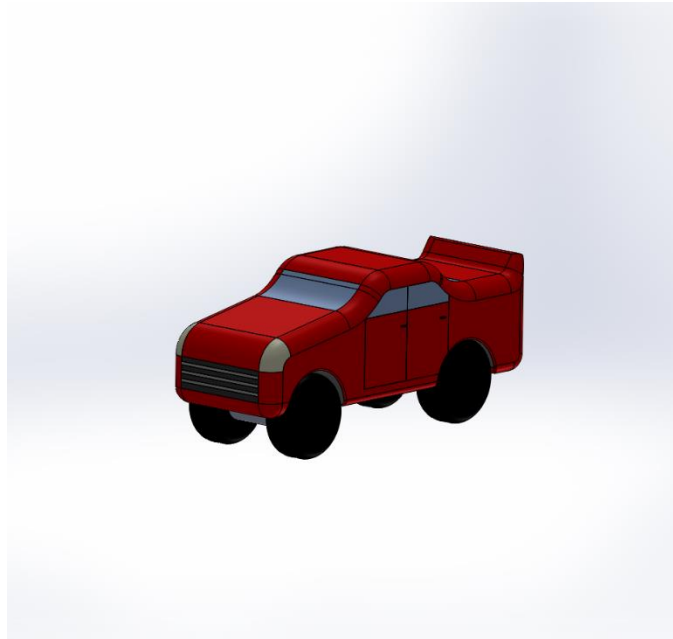


Figure 1: Picture of my personal CAD project

For this project, I chose to create a Solidworks model of a race car. I was originally going to do a model of a football helmet. However, that was way too hard to make. So, I started asking for different ideas of what I could do that would be doable and was given the idea to a small model car. So I searched for different designs of model cars and decided to use the one below. I made a couple of changes to make it more of my own model but the overall design is the same.



Figure 2: Car used to model my project off of.  
source: <http://www.maximum-velocity.com/stockcar.jpg>

The hardest part of this project was either making the base of the car body or assembling together the entire car. The base of the body was difficult because of all of the curves that a car has. We never learned how to make the curves that I needed, so I had to figure out which tools in Solidworks did what I wanted to do. Once I found the tool that worked, it was a lot of trial and error work until I got the look that I wanted. The other difficult part of this project was assembling all of the parts together. I have always had issues doing this during any of the assignments that were given in class, however this gave me more difficulty than usual because there wasn't a clear face to mate the axle and tires to the body. Solidworks gave me trouble trying to get the axle oriented correctly and took me a decent bit of time to get it the way I wanted.

Once I graduate, I would like to get a job in a mechanical engineering field and being able to create models is an integral skill for that type of job. The task of making a concept into a model is something that I need to work on and completing this project was a good way for me to work on these skills. Despite looking a little too childish for my liking, creating something like this was a little more complicated than I thought and was a fun challenge to take on and complete.

Something I learned over the course of this project was that sometimes a simple answer is the best answer to a difficult problem. When making the car, I wanted to add windows, headlights and doors. However, it was going to be really difficult to make a front and back windshield. So, in order to make it look like there was a front and back windshield, I just changed the color of the sections where they would be to a glass-like color.

Overall I enjoyed working on this project. It allowed me to work on something different and gave me good practice on SolidWorks. Perhaps sometime in the future I could work to make a more realistic looking car.

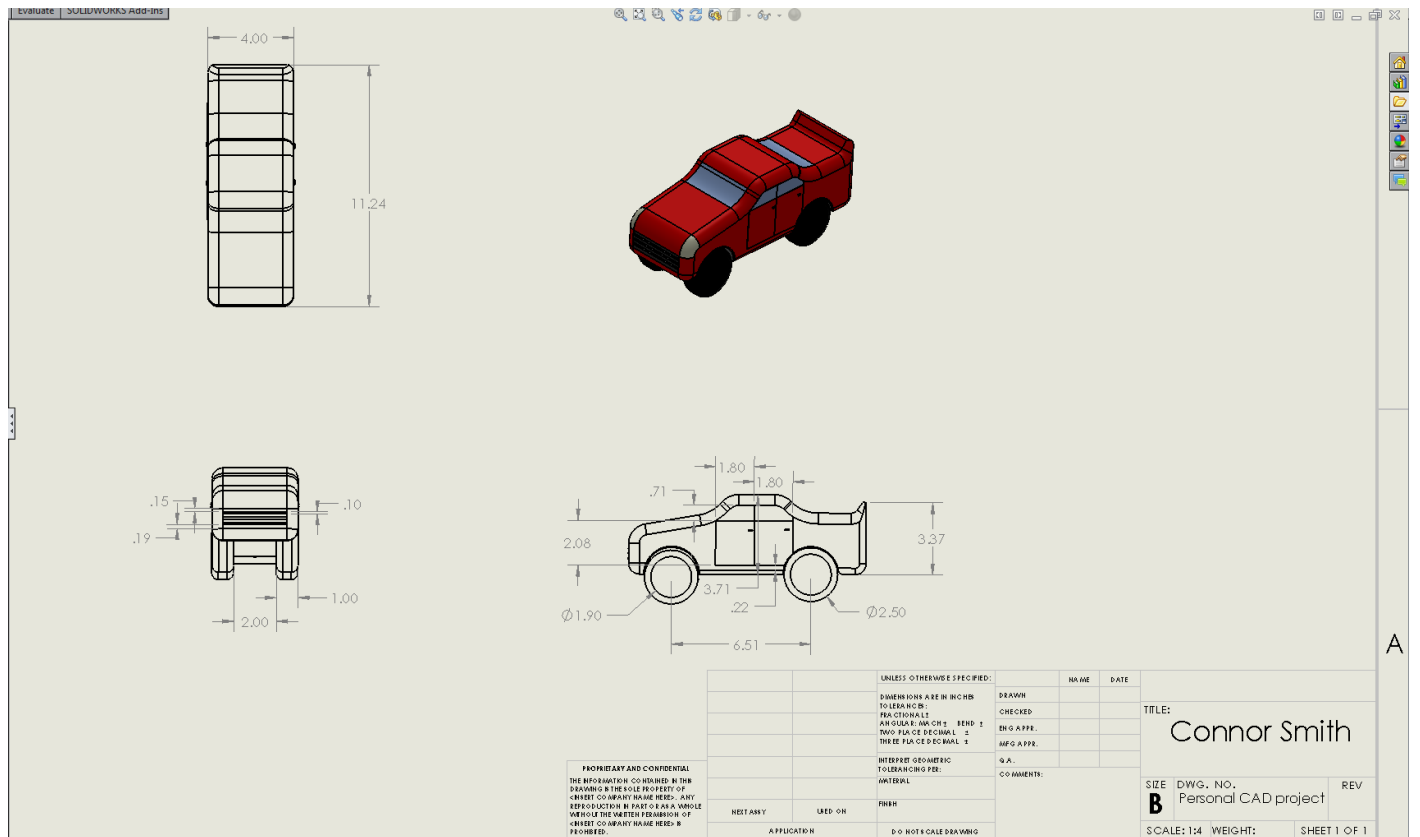


Figure 3: Multiview drawing of my project