Personal Solidworks Project: Jeep

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In my Engineering Design class, we were tasked with creating a Personal CAD model. It had to be something that interested us, but at the same time was also a difficult thing to make in the program we used, SolidWorks. After a lot of thought I came to the conclusion that I would attempt to make a Jeep.

So the question is, why choose a Jeep? I decided to choose a Jeep because I have had an extensive history with them during my lifetime. Years ago, my parents bought one, which was very similar in color to the one I designed, and I thought it was the coolest thing. We eventually grew out of that Jeep and got another. This Jeep eventually became my personal car. Ever since I started driving the Jeep, I became infatuated with the company and the car. They interest me greatly and I decided that the best way to show my interest would be to make a model of one from scratch.

While designing my Jeep, I ran into some problems. Since it’s a car, I had to make wheels to go with it. The wheels caused me a great deal of trouble. I had made a wheel before in a CAD program, but that was guided and now I had to call upon that memory of making one and try to do it again. It took some time, but I eventually did it. In order to make them look as real as possible, I had to make them look like they had curves and bolts on the rims. The bolts were difficult to make because I had to use two new feature called ‘Hole Wizard’ and ‘Chamfer’ in the program. I eventually finished the wheels, but only after some heartache and stress.

Modeling the Jeep was hard, but I was not alone in doing it. I had some photos I found online that helped show some views of it, along with my memory. These photos are shown after my report.
In the end, my understanding of SolidWorks was changed because I had to do this project on my own. It helped me to not rely on instructions to do something. It also helped me to figure out what some other features were, even if I did not use them in the final assembly. This project taught me a lot, while allowing me to have a fun time with modeling something that interest me.
