Lego Car


Based on the image given on the right from the above URL

By: Matthew Johnson
My inspiration for the personal CAD project was based on my favorite toy from my childhood, Legos. While I was growing up, I have always had a great time constructing space ships, cars, buildings, and many other fascinating objects using the simple plastic bricks. Therefore, I thought that if it was so much fun playing with them as a child, I would have as much fun constructing them on Solidworks.

The most difficult part of the project was the assembly part. Because the car had to be made completely out of Legos, it required the construction of Legos of all different shapes and sizes. While this was time consuming, it mainly required repetition of simple steps and was not too difficult to do. However, the difficult part was the assembly of ten to twenty different Legos into an object that resembled a car. With many steps including mating and rotating that needed to be done to each individual piece before it was fully defined, this step took me a very long time and was what I spent the majority of my time on during the project.

The image that I based my car off of can be seen above. For the most part, I constructed my model based on the image above, with many similarities including wheels, windshield, and spoiler. However, there are some slight differences between the two, including the bottom of all of the Legos, the rims for the wheels, and the color of the car; which in turn made my car more unique and simplified.

My understanding of Solidworks was greatly enhanced through this project. Some tools such as mating and loft that I was decent at before became very simple through repetition. Furthermore, the use of new tools such as array, appearance, and rotate enhanced my knowledge of the program overall.