R2D2 designed by Cam Babers of EDSGN 100 Section 022 on December 4, 2015
This is a model of the Star Wars Character R2-D2 that I made using the software Solidworks 2015 x64 edition. This project took many weeks of hard work and patience to complete. While it did cost me sleep and free time, I enjoyed every second I put into this model and am very proud of my results.

I picked R2-D2 to model for this project. Along with my brother and dad, I have always been a huge Star Wars fan. I have seen every movie at least 3 times and played Star Wars Battle field and Lego Star Wars for 2 years straight. When I heard of the project I tried to pick an object that would be personally fun for me to make, yet challenging at the same time. I am very happy with my choice as it satisfied both of those wants.

I began the body of R2-D2 by drawing a line and using the revolve feature to shape his head. I then drew a circle on the bottom of the hemisphere and extruded that to make his body. I used the wrap feature to make cuts as well as extrusions on his body. To make the legs, I extruded a circle from his side and extruded two rectangles from the circle and filleted the top side to give it a curved shape. I used the draft feature to shape his feet and then used the mirror function to create the other leg. For his normal eye I extruded a square and a circle in order to give him a lens. The extended eye was used from extrusions and a revolve function. R2-D2’s arm was made by a revolve function and then three separate lofts.

The hardest part of the model to complete was probably the wrap feature. It was a new feature to me and lining up the sketches on the new plane onto a cylindrical surface was pretty difficult. It took a while to get used to where the sketches would end up on the curved surface versus where they are on the plane I was sketching on. I not only learned and mastered the wrap feature, but also the draft feature. While they were somewhat difficult to grasp, it was worth it as it made the project look much
more accurate and realistic. While I had done the loft before, after this project I feel that I truly mastered the loft feature during the course of this project.

The main thing I learned from this was how to utilize solid works. I feel I learned enough to create almost anything that I want. Asides from that, I learned the value of constant hard work and patience. While the features of the Solid-works program are difficult to master, finally getting them down is worth every second of hard work that it requires. I also learned that it requires a constant effort to complete things as opposed to doing everything in one night.