F-16 Solidworks Project
By Dan Schain

For my personal CAD project, I attempted to re-create the F-16 fighter jet. I have always been interested in military jets because I have visited the airshow yearly with my father since I was five. When I took on the challenge of creating this jet, I was not ready for the many obstacles I would face. With only the CAD experience to create lofts for surfaces rather than boundaries, I needed to constantly re-create section views of the body to make sure there could be a solid connection between the planes. The most difficult part of my CAD project was to create an accurate section view of the plane in multiple parts based on exterior images. I was not able to perfectly represent it, although I tried my best to preserve the overall shape of it. I am a civil engineer, so my immediate plan was to create either a bridge or building. However, I wanted to challenge myself to create something I did not think possible, which led me to the F-16 Jet. I am very happy that I chose this, because it was very fun, and I learned many useful tips and tools while working. I cannot wait to become an expert using the computer rendering programs, because I will be able to have fun while producing impressive renderings. I am glad that the teacher, Liz Kisenwether, decided to assign a personal CAD project because it allowed me to find something that interests me, fighter jets, and work to expand my computer skills while creating it.

F-16 Regular View

The above picture shows a raw image of my final product, with some of the many steps, listed on the side. The main features utilized were lofts and boss extrudes.
I rendered a side view of the F-16 to show a more realistic image of my final product.

F-16 Render Compared to Real Life

Photo on left from: http://upload.wikimedia.org/wikipedia/commons/c/c9/F-16_June_2008.jpg

The above image was the main picture I used as I attempted to re-create the F-16. By doing a side by side comparison, you can see how successful I was at doing this.
The picture above shows some general dimensions of the F-16 Jet that I created. The dimensions shown were chosen because they provide an overall idea of the size of the jet. As seen in the picture, the dimensions are in meters.