Chess Board Set

In my Personal CAD project, I reproduced the chess board and the chess pieces from referencing the pictures and dimensions of the chess boards that are already on the market.

Picture reference:


King

The King had the most assembling parts from this project. Also, it became the standard to all my pieces, such as the height, diameter, and etc.
Queen

The Queen only used the resolve technique in the whole process.

Unlike the King, it had no assembly.

Bishop

Same as the Queen, Bishop did not have any assembly and only used the revolve technique.

Knight

From this whole project, Knight was the hardest piece to make.

Only the base could be revolved and the head had to be extruded.

Forming the shape of the head was the most challenging.
**Rook**

Rook was not as challenging as the knight but it was somewhat difficult.

The top part of the rook and using the extrude cut to make it into a castle shape was very time consuming.

**Pawn**

Unlike the Queen or the Bishop, Pawn had 2 parts of assembly in its process. The body and the head had to be made separately in order for the head to be a sphere.

**Chess Board**

Each dimension of the square was as twice as big as the diameter of the pawn. It mostly use the extrude technique.
This is the final assembly of all the parts in my project. Since the pieces should be moving freely in and out of the chess board, the mate function was only used for “coincident” the bottom face of the pieces to the top face of the chess board.

I picked the Chess Board as my Personal CAD project because I loved to play chess since I was little and always wanted to make it one day. Also, it motivated me from playing chess at the HUB every Thursday night. The most difficult part of this project was finding out the dimensions of the pieces and making the head of the Knight. What I learned from this project was that it takes great work and effort to make even a little toy that we see on the market and those should be taken with care. Overall, this project was somewhat interesting and would be great to be challenged with even a greater project later in the future.