Directed Study Proposal: An Implementation of 3-D modeling interface using User Centered Design

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This directed study will encompass the analysis of existing 3D modeling software and construction of a prototype for a 3-D modeling interface. The project will make use of a user centered approach for the prototype design lifecycle.

I have used the 3D modeling program Blender for approximately 4 years in my free time, and it has become apparent that there are serious flaws in the user interface that make the program difficult to use and unintuitive. The software is notoriously hard to use, but remains one of the top 3D modeling programs in the world. Another 3D art solution is Maya, which I have not used as extensively, but seems to outperform Blender in terms of usability, even though the two programs can produce very similar quality art. I want to see what makes Blender so difficult to use, what makes Maya so usable, and what could be improved on both if a completely new design were created.

My plan for the project is to perform analysis on Blender and Maya, along with analysis of what functions are necessary for a 3D modeling software. The next step will be to create multiple new designs for a software interface based on the specifications gathered in the analysis step. The final step will be to produce a prototype of a single design.

The overall goal of the project is to use user centered thinking to produce an intuitive 3D art software interface.