Jerry Yu

15-112

Section I

Competitive Analysis

There have been several different virtual closets created with the Kinect. One of the first ones was Swivel by FaceCake, demonstrated at CES 2012. Swivel created a user interface where people select from existing clothes with the Kinect hand commands and could then virtually wear them, which was a really cool way of GUI navigation I hope to implement. Instead of focusing on a single clothing item like T-shirts, they were spread among a broad range of dresses, shirts, scarves, bags, and other accessories. However, the clothing projection was almost 2D and only allowed the user to have a little rotation. The program also only allowed articles of clothing already loaded into the system, with no way of having imports. Therefore, I hope to focus on only T-Shirts in order to implement the 3D system and possibly have custom clothes imported. Another interesting feature was that they used the Kinect fusion in order to get 3D interactive depth map of the body. I hope to look into this feature and possibly implement it in my program if I have time.

Zugara also has made a virtual closet as well. They also have hand controls to move a cursor and scroll through different clothing and put them on. One unique feature was that they had different backgrounds users could choose to model their clothing in different environments. Then, users can imagine themselves modeling in a baseball field or at the beach. I hope to possibly add this feature if I have time. Also, they use the kinect’s data about the body’s dimensions to custom fit the clothes. This is a unique feature I hope to implement. However, an antifeature is also the large selection of clothes that prevents the models from being 3D. By focusing just on T-shirts, I can have a reusable model for each design of the shirt. Another unique feature is the ability to take screenshots of a person modeling an outfit to share with their friends. I hope to implement this feature in order to allow users to share their creations.

My Virtual Model is another platform that licenses out their software to allow companies to model their own products. One of their main features is the Mix and Match Outfits, which allows users to save their own set of outfits. However, my program is for T-shirts, but I hope to add saving features for a set of similar designs. An antifeature from their platform is the fact all clothes are done in 2-D, which I hope to make 3-D with the modules of OpenGL.

Overall, there are several different virtual closets right now, but they focus on providing a wide range of clothes for users to try on rather than focus on creating a detailed model for one specific item of clothing. By focusing on the T-shirt, I will be able to make a 3-D model but still implement many of their interesting features like custom fitting, backgrounds, saving, and different backgrounds.