Title
Emotional 3D virtual body

Goal
Augment the reality to inflect human emotion based on gestures recognized by Kinect

Milestone #2 Summary
We have identified certain gestures that could be regarded as a sign of pain or being uncomfortable. For example, a patient repeatedly touches his forehead may indicate that he is headache.

Once this gesture is recognized, we change the color of head, currently red. This feature is implemented based on OpenGL, in which we have to compute the area of the head, can modify the image at runtime, which is main challenge in the virtualization part.

For building a quick prototype, we used quite a few of the shelf open source libraries. and did a simple experiment with the use case described above.

Demo
Figure 1. Init state

Figure 2. Human is recognized and body color changed to grey
Figure 3. Gesture detected and head color changed