

Kinect vs. Experiment Applications

To Do From Last Week: Start working on my project!

June 17th: I started the week off with working on making the experiment application portable. I think I figured out a pretty easy solution. Couldn't get a good way to create one executable, since there are many dependencies for the program, so I copied all necessary files and folders to another location. We can just move these files onto each computer in the study. It's only about 120MB, so it doesn't take long to transfer. And it saves all the log and audio files in the correct places.

We borrowed a kinect from another lab, so now I am working on getting that setup on my computer. Took a lot of troubleshooting, but I finally got the kinect connected and sort of working. It is running with the [Flexible Action and Articulated Skeleton Toolkit](#) (FAAST) application, but I haven't found out yet how to apply the skeleton to the image data. Still working on that. Nevermind, got FAAST completely working. It loads a skeleton now. Now trying to figure out more about how it works.

I figured out some of the basics of FAAST. Got it to react to body input. Looking into working these aspects into the Alex code, using key inputs. The Alex code is pretty daunting. Similar to working with the Looking Glass code base I worked with last year.

I figured out a small test way to run FAAST with Alex. Alex has camera controls built in, and I mapped body gestures to these controls, to move the camera around by moving my hands. Proves I can get it to work in some context. Now trying to sift through his code to get a better understanding of how he works. Pretty confusing so far.

June 18th: Started looking through the Alex code again. Spent a lot of time digging around the Alex code.

Took a detour into working on the second experiment app, called the Slier/Sticker application. The first application I made, noted previously is now called the Creatures app.

I had some issues with trying to copy the Summer2013.sln, the other experiment app, to use as a starting point for this one. Another one of visual basic's wonky referencing issues like I had with copying CS files. I eventually worked it out though.

Created basic interface. Started writing code. First real error: can't get the program to

play the next utterance. It plays the first one, and then stops. Everything else has been working well so far. Eventually fixed this and a few other bugs. For some reason the program always starts on audio one, even though they should be randomized. Fixed! I was assigning the random variable after the first utterance played. Now I assign it when the utterance list is created.

June 19th: Continued working on the second experiment application. This one was much easier, since I had already figured out how to do everything on the last one. Finished the second experiment app, at least until I can show it to Samantha for modifications.

I switched back to kinect stuff then, and tried to install a few more kinect libraries. Failed pretty miserably. Ended up messing up FFAST in the process, and had to fix that. I think I'm going to try to get some face tracking integrated still.

Went back to working through Alex code. Made some progress. Located buttons on one of the woz interfaces that move alex's gaze around, by sending BML commands. I can probably manipulate these to move them whenever I want.

Worked on getting Brekel Kinect working, which would add in more functionality to the kinect manip. I fixed the OpenGL issue by updating the comps graphic drivers, but now the program crashes upon loading. Might be a problem with the kinect drivers, because Brekel only works with 32 bit and I have 64 bit installed?

June 20th: Got Kinect BVH Mocap installed. It's a motion capture software for the Kinect. Went back to working with Alex code.

Getting rid of the progress bar on the snacktime form. Distracting, and the audio sometimes lags, making it unsynced. This resulted in a weird error where the play button does not play the audio. Clicking it does nothing. To fix I had to undo all the changes I did, and just hid the countdown bar instead of deleting it. Works fine now.

Starting the third experiment program, the Favorite things app. Created a MainForm that looks a lot like the FreeTalk section. I got that annoying referencing error again, and I had to look back at how I fixed it. Visual Studio really doesn't like people copying files.

ToDo: Make a program that loads all programs and can pick which one to play.

June 21st: We went to Urban League this morning to test our programs on their computers, since we will be piloting our programs there on monday and Wednesday next

week. After we got back, I fixed a few things in the programs. I am still working on the favorite things program. The images aren't changing correctly, and the next button doesn't seem to be working.

I was really busy today and filled this in afterwards, instead of as I did things, as I usually do, so it's not as thorough as I prefer.

ToDo for Next Week: Finish the favorite things and Slider apps as soon as possible.