Project Identity

Head Mounted Art Device, Game for Improving Speed and Accuracy of Name Recall, and Alternative Devices for Mouse Input

Week 2
28-Jan-08
Matt Zywiak

Work Completed

The work completed by me this week has been mainly focused on the voice recognition game and the head and arm mounted art instrument. The voice recognition game has been almost completed without the voice recognition component added into it. The game is now able to upload pictures from a folder located on the computer and display them randomly in the actual game. The user is also able to upload the names of the person in question and that name will be saved into an array which can be displayed randomly while the game is in progress. We also tested the game with a picture loaded from a camera. As you can see from the following picture we were able to load the picture into the computer game and have it displayed on the screen. The names in the text boxes were loaded from the Name Array which houses all of the names.

As well as completing most of the voice recognition game I also helped Derek and Andrew to complete the housing for the foot mouse and to integrate the circuitry for the foot mouse into the housing. Pictures for this are located in the weekly presentation. I also built the first part of the carriage for the second track in the Head and Arm mounted
art instrument. We machined a piece of aluminum to 2 ½ by 3 inches and drilled four holes into it to attach the guide rod. I also threaded these holes to allow for the attachment with bolts.

Future Work

Over the next week I hope to finish several small things with the Voice Recognition game and then begin incorporating the speech engine into the computer game. This should be fairly simple as we have already finished a couple of small programs which incorporate voice recognition into them to push a button. We also hope to finish construction of the second track for the Head and Arm Mounted Art Instrument and attach the motors which will drive the tracks. We have also received a wii remote and a Bluetooth chipset which we hope to experiment with during the coming week to find the feasibility of using the wiimote for an infrared motion sensor.

We were not able to complete construction of the trackball housing but we were able to order the trackball which will fit inside the housing. We hope to complete the construction of the housing and internal components over the coming week and if we can do that I think we will be in very good shape.

Project Review

I believe that we are moving along with our design project at a very good pace and that we are meeting the goals of the first two weeks. I think every group member is contributing equally to the completion of the project and unless we encounter problems with the Speech Recognition Engine or the Infrared sensors I think we will be completing our design project right on time.

Hours Worked

14 hours