Work Completed

This week I programmed our friendly animated character, the koala bear that will be our scanning agent in our program. This required me to develop new skills in Flash programming. I tried to keep the character’s shapes simple, which will make character manipulation easier when we program the various ‘movie’ clips that will comprise the movement from object to object and from scene to scene.

The other work I did this week revolved around the output device. We received the wireless video transmitter/receiver on Tuesday. With this new element came more testing. The first part of the testing required making sure that the device worked. With the help of my teammates I was able to power the device, transmit video wirelessly, and then confirm the range of the device. The literature that comes with the device claims that it will work at a range of 300 feet. In our lab, which has an extremely high amount of interference, we were able to transmit the signal perfectly at a confirmed range of 35 feet. Although this will be adequate in the classroom it may not be long enough in the home environment. More testing will be required and some type of shielding may need to be developed.
The other work I did on the output device was dimensioning the new components we received in order to design the case. At this point in development the case needs to house the LCD and its circuitry, the 12 V NiMH battery, and the wireless receiver. Additionally there will be some exterior mounting, which will most likely include a tamiya clip for recharging the battery and a power switch so that the LCD will not constantly be charging the battery. Unfortunately the wireless receiver is larger that we had hoped it would be, measuring 6” x 3 1/8” x 1 ½”. This is very near the size of the LCD itself except the receiver is much more thick. After considering a layout I came up with initial rough measurements for the case of the output device and I am fairly certain it will all fit into an enclosure measuring 7” x 4 ½” x 4”. This seems like a very reasonable size to me.

**Future Work**

The work I plan on achieving this week includes building a mockup of the output device using cardboard. I want to obtain a switch and begin testing the LCD in conjunction with the switch, battery, and wireless receiver. I am also considering the possibility of adding indicator LED’s that will tell the user what mode the device is in, charging, running, or no LED illuminated to indicate that the device is off. I need to determine if the one 12V battery we have will be enough to power the receiver and the LCD, although I already was able to demonstrate that it worked the battery voltage was dropping quickly.

The other are my future work will focus on is Flash programming. Kyle has been focusing on the home environment; now that I’ve programmed the koala bear I’m going
to start programming the school environment. I would like to have the classroom developed by the end of the week.

**Project Review**

At this point in the project we are very near completion of the input device, the button has been programmed to act as an ‘enter’ button, and Tristan has drawn up an initial layout for the components. The home environment is well on its way to being programmed, and the friendly character is done for now. The output device is coming along nice and should be completed within the next two weeks. The major area of necessary improvement needs to come in Flash programming; we still have a large number of rooms to program. Once the rooms are programmed certain objects need to be made selectable and the hierarchical menu system has to be implemented.

**Projected Timeline**

Tues (09-25-07): Team meeting with just team members, weekly reports, update website
Wed: Research output device, consider charging circuit, program Flash
Thurs: Research output device, consider charging circuit, program Flash
Fri: Research output device, consider charging circuit, program Flash

**Hours Worked**

12 hours