Week 2 Progress Report

Freely Adjustable and Accessible Keyboard for Client with Cerebral Palsy

Team # 6
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Work Station Update

- CD Rom Drive on CPU fixed
- Installation of Keyboard Control Board was a success
- No problems with hardware connectivity
Work Completed

- LED Circuit Design
  - Basic Circuit with resistors and 10k potentiometer
  - Designed for a 9V battery source
Work Completed (cont’d)

- LED Circuit Design (cont’d)
  - Circuit Elements to be mounted on aluminum backing
  - Potentiometer and batteries to be accessible on outside for user
Work Completed *(cont’d)*

Figure 1. Circuit Prototype with 9V voltage source
Work Completed (cont’d)

- Research into PCB strips for switch mounting
  - Saves money by using much less area
  - Secure backing to prevent failure of switch connections
  - Good connections to control board
Work Completed *(cont’d)*

- X-Keys Macro Programmer
  - Programming of keyboard switches
  - Able to use switches to replace mouse
  - No need for separate arrow pad
Future Work

- Meeting with Miriam Kurland 2/7/07
  - Finalize design of keyboard layout
  - Finalize design of stand

- Contact 80/20 Inc.
  - Inquire into materials needed
  - Ask for price quote
Future Work (cont’d)

- PCB Express
  - Research design of PCB
  - Start design of PCB
- Keyboard Controller
  - Start programming of switches
  - Test connecting switches to controller
- LED Backlighting
  - Order Aluminum for mounting