WEEK 1 Progress Report

Freely Adjustable and Accessible Keyboard and Arrow Pad for Client with Cerebral Palsy

Team #6
Nolan Skop
Stephen Heussler
Parts Received

- Cherry MX Switches
- Keycaps
- Green Backlighting LEDs & diodes
- Control Board
- PVC sheets
Work Completed

- Testing of the Switches
  - used a 2.4 volt source and the switches in series with an LED
  - when switch triggered, LED illuminated and 2.4 volts was recorded with multimeter
Switch Testing

Before

After
Work Completed

- Created basic circuit design
Work Completed

- Redesign of keyboard mounting
  - Client contact desired
    - Upward/downward movement
    - Forward/backward movement
    - Keyboard rotation (tilt)
  - Use of 80/20 industrial erector materials
    - Preliminary design created
    - Meet with client contact on 1/31/07 for measurements and design
Adjustable Design

Diagram: Adjustable Design with labels:
- Adjustable Clamp
- Adjustable Pivot Part # 4383
- Connection to Keyboard
Future Work

CD-ROM broken
- replacement will enable the installation of control board software

Replace Cherry MX switches
- switch w/LED mount to switch w/diode mount
Future Work

- Start programming keyboard controller when CD-ROM is fixed
- Meet with Prof. John Ayers, and create preliminary circuit design for keyboard
- Finalize design of keyboard mount and contact/order parts from 80/20
- Code the keycaps
  - Blender marker technique
  - Sticker technique