

Computer Input Device for Individual with Muscular Dystrophy

Client: Richard Kunz & Mary Sesto

Team Members: Nathan Werbeckes, Team Leader
Vince Mi, Communicator
Kuya Takami, BSAC
Hyungjin Kim, BWIG

November 1st – 9th

Problem Statement

The goal of the project is to minimize the setup time and improve the usability of the computer input device currently used by the client. Our focus will be replacing the trackball mouse control device with something more suited to his limited motor control. We will also provide wrist and forearm support which can be easily set-up and adjustable.

Accomplishments

- ▶ Met with Mary to discuss progress and funding
- ▶ Researched and found adjustable platform suited to our design
- ▶ Researched USB compatible joysticks
- ▶ Brainstormed ideas for forearm support

Difficulties

- ▶ Finding a joystick with the properties we want

Goals

- ▶ Decide final design for forearm support
- ▶ Decide final joystick design and purchase
- ▶ Decide on mouse design for left hand (clicking hand) and purchase
- ▶ Conduct testing on ideal height of joystick

Assigned Tasks

Kuya: Research on left-hand clicking device

Vince: Research on USB compatible joysticks

Hyungjin: Research on adjustable platform

Nathan: Research top of adjustable platform design and forearm support mechanism

Project Schedule

Task	Oct. 28	Nov. 4	Nov. 11	Nov. 18	Nov. 25	Dec. 2	Dec. 9
Meet with Dr. Sesto, 2 nd half-semester plans	X						
Finalize forearm support design							
Research and buy adjustable platform							
Build arm holding mechanism							
Test different heights of adjustable platform							
Finalize and buy left hand clicking device							
Research and buy joystick							
Test different joystick heights and mechanisms							
Design Final Poster and prepare for presentation							
Write Final Paper							