Work Completed:

During the week since the last report, I’ve focused most of my attention on the test games for the alternative mouse input device. The first game, which is a game where the user clicks on various objects to destroy them and gain points. These objects move around the screen and require the user to have control of the mouse to click. I feel that this provides both a fun experience and training assistance to users who want to use an alternative mouse input device. The first game is relatively complete, a testing phase where people can play and find bugs or make suggestions will take place. Various changes will be made based on players inputs and then the game will be finished.

As seen above this is the game maker interface for our first game. The screen seen is the introduction screen and displays the BME website header as the background image. There has been significant improvements made in both the look of the intro and
instruction screens. Levels were slightly changed to get rid of various bugs in gameplay. For example, walls were moved to prevent object clumping and undesired trapping of objects. Changes to text colors were made to make viewing easier on the eyes. The final level has been made slightly more challenging. This is to accommodate players who may reach a high level of expertise with the alternative mouse input systems. It was also decided due to the programming ability of game maker to keep the final level on a timer, rather than to use a ‘life’ system where the player will lose.

Two games need to be developed for the alternative mouse input system, the plan was to get a good start on the second game this week. However, the progress that was made into game two was lost due to a computer error and the game was lost. Essentially the game was a variation of the ‘pong’ game proposed in our final report. A single paddle will be at the bottom of the screen and will hit a ball upwards to destroy various bricks. It is based off another older game known as ‘breakout’.

Before the game was erased, many objects were correctly programmed and two levels were successfully completed. However, like I said, the game was erased. The benefit this gives is allowing me to recreate the program from scratch is perhaps make changes that will make the game more enjoyable. For example, the control system for the paddle wasn’t satisfactory in my opinion. The estimated time for redesigning the game is also much less since it will be the second time I have done this.

**Future Work:**

During the next week, I plan to have both games in a finished state. Some testing will be done and then they can be turned into exe files and put onto disk. Once that is finished it will allow me to work on other different projects.

The motors for the art instruments were already researched, and order forms will be submitted next week. A power supply will also be ordered in the next week. Testing for the alternative mouse input device will be completed and hopefully we can start construction on the head control mount which utilizes infrared receivers and infrared LED’s to communicate.

**Hours Worked:**

Andrew: Sunday 3:00 – 4:30 (1.5 hours)  
Monday 10:00 – 11:00 (1 hour)  
Wednesday 10:30 – 11:30 (1 hour)  
Friday 10:30 – 5:00 (6.5 hours)  

Total = 10 hours