Work Completed:

This week both of the computer games for the alternative mouse input system have been completed. Minor changes may still be made to them however they are balanced and playable. On the second game a couple more levels were added to increase the game length. The total number of levels is now 7. A high score board has been added to track the users score. Several new objects and bricks have been added to increase the complexity of the game. These include new moving bricks, free life bonus ect… Overall I feel that both games test what they are meant to about the alternative mouse input. Game one tests the users control of navigating the mouse around the screen. The second game is meant to check the users control of the left and right click buttons to the alternative mouse. The user will have to move the paddle left or right on the screen to hit a moving ball. The ball then destroys objects. As seen below here is a sample of one of the levels from game two.
Work was also done on the housing for the alternative mouse device. Various things from drilling holes for wires to insetting pieces to make them flush against the ground were done. Overall I think the housing is near completion and the foot mouse should be done soon.

For the Head Mounted Arm Instrument work was completed on the tracks and the motors. We received the motors on Friday, and tested them to make sure they worked. They did. We purchased a screw from the machine shop and worked on the base for one of the tracks. More time in the machine shop will need to be spent assembling the second drive screw.

**Future Work:**

For the alternative mouse system some testing of the games will need to be done in order to insure there are no more bugs in the program. Most of the time will be spent on completing the two alternative mouse systems. Next week we should begin the internal wiring of the mouse systems. When using any new input device there is some degree of coordination involved. It takes some getting used from different inputs. Going from a standard mouse to a foot mouse it is hard to gauge the users initial coordination, tests will need to be run on the games with the actual alternative mouse system. This will be done after an alternative system is operational.

Work on the head mounted art instrument will be continued. This will involve construction of the second screw system and then assembly of the X-Y track system. Metal working takes some time so this may take a while. However while this is being completed more tests can be run on the motors to check that they will indeed be able to propel our art system. For the head control system the plan is to use blue-tooth technology with the assistance of a NintendoWii controller. This will allow the users movements to be tracked. Tests will need to be done to see if this is can work. As a back up we will have a joystick control the mouse system.

The name game is also progressing smoothly. Much of the programming has been completed by Matt. He hopes to have that done by next week and to begin to integrate the voice recognition software. If everything goes smoothly this project may be completed within the next 2-3 weeks.

**Hours Worked:**

Andrew:
Monday – 10 – 11:30 (1.5 hours)
Friday – 10 – 5pm (7 hours)
Saturday – 12 – 1:30 (1.5 hours)
Sunday – 12 – 1:30 (1.5 hours)
Total Time = 11.5 hours