Head-Mounted & Arm-Mounted Art Design System

Week 8

Team 1:
Nemi Kotadiya
Becky Lussier
Sirisha Muppidi
Work Completed

Over this past week...
Budget

• Outstanding Budget
  $632.94

• Spent:
  $867.06
Translating Eye Blink

- Only certain signals will be read
- Add a filter to our existing eye-blink switch
  - Translate only purposeful eye blink to motor function
Eye Blink Translation Ctd.

- Only pulse over a set (capacitor defined) time wanted will turn the motor on or off
- Pulse will still be processed if longer than the set time
Flip Flop Switch

- **Sequential logic operation**
  - Will just turn the switch on if it’s off or vice versa.
Purchased Small Parts

• Small parts that could not be ordered from online or catalog

• Mansfield Supply
  – New head mounting brackets for gooseneck
    • Plastic
    • Metal
      – 2 screw holes
      – 1 screw hole

• Radio Shack
  – Monojack
Purchases Ctd...

- **Wal-Mart**
  - Adhesive
    - Industrial strength adhesive E-6000
      - Will reinforce all gooseneck attachments
  - Chin Strap for helmet
    - We will line with neoprene fabric for added comfort
Future Work

To be completed by Week 9
To Be Done

- Planning for emergency fail safe design
- Continue programming Allegro Chip
- Make circuit for eye-blink switch filtering
- Finalize the circuit for the eye-blink switch
- Order circuit elements for eye blink circuit latest by the 3/26
- Sew neoprene fabric to gooseneck and wrist guard
- Attach gooseneck to helmet & test how it feels
To Be Done Ctd...

- Order 2 utensil attachment (shatter proof) by 3/26
- Finish machining arm mounted compass
  - Because that’s the speedometer we have
- Machine all parts of head mounted gooseneck except for attachment to speedometer piece
- Get/order new speedometer for headpiece by 3/26
- Assemble arm mounted gooseneck
  - Attach motor + gooseneck + speedometer + compass
Progress Analysis

• Team behind due to:
  - Unexpected snow day
  - Needed parts in locked room

• Work overtime to finish mechanical aspects of project

• There will be an increase in focus on electrical aspects
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Thank You!

Any Questions?