Interactive Wheel of Fortune

Team 4
Week 4 Report

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Work Completed (1)

- Support system for the bearing block

Figure 1: Design

Figure 2: Updated Design: Dimensions for the wooden block (5” * 5” * 3”). Dimensions for the shaft (5” long and 1” in diameter)
Work Completed (2)

- Mold well for the wheel
  - Mike Zenker was contacted

- Base of the game
  - Ordered from www.usplastics.com
  - Blue, heavy duty plastic
  - Dimensions: 21.5” x 13” x 6.75”
  - No painting

Figure 3: Base of Game
Work Completed (3)

- PIC16F874 Program (95% complete)
  - Random variable
    - RB0 and RB7 cause interrupt when high
    - Timer0 can have any value between 0 and 255
    - Values between 0 and 255 are divided into 16 random numbers
    - Delay function is used to create a delay between 2 and 4 seconds
Work Completed (4)

- PIC 16F874 Program (95% complete)
  - LEDs
    - RD0 through RD7 will go high when the motor is turned on
  - SP03
    - I2C communication
Dc motor
- Stops as soon as the Dc voltage is cutoff
- 42 RPM at 12 VDC

SP03
- Tested to see if it works
  - Need an amplifying circuit with a volume control
Future Work

- Complete the support the system for the bearing block
- Begin the construction of the wheel and the pie pieces
- PVC- clean, sand, layer it with epoxy and paint
- Debug and upload the microcontroller program
- Install text onto the Sp03 module
- Build a amplifying circuit for the speaker
- Start the construction of over all circuit
Hours Worked

- Yadverinder Singh - 13 hours
- Kristen Gingras - 13 hours
- Meghan Schmidt - 13 hours