Engineering Club Robot

Meeting 1- minutes

Fall semester 2014

10/29/14

* Introduction
* Discuss what a robot is/does
  + Sense, think, act
* Discuss goals of the build for the semester

1. Get parts purchased- send list of parts to Bruce on **Monday 11/3/14**

-part prices and sites are from Justin

-if comparable parts can be found cheaper let Drew know by **Monday**

* 1. Skeleton
     1. 17 Degree of freedom body from – Ebay - $98.88
  2. Servos

For use on moving parts of robot

* + 1. Digital torque MG996R Servo Metal Gear for RC Helicopter, Futaba JR Car SU- ebay- 17- $5.68each-$96.65
    2. Servo arms, to connect the servo to the frame- **???-???**
  1. Processor

For controlling the body’s movement

* + 1. Arduino Mega 2560 Rev3- Amazon- $28.94
    2. Servo controller- **???-???**
  1. Sensor
     1. Virtuabotix PIR Motion sensor for Microcontrollers- Amazon- $5.95
        1. Range ~3M
     2. SMAKN Ultrasonic Module Hc-sr04 Distance Sensor for Arduino Amazon-$5.66
        1. Range ~3-5M
  2. Power source
     1. Energy Shield- Rechargable Li Battery for Arduino- Amazon- $44.95
  3. LED’s with built in resistors
     1. LED’s- **???-???**
  4. Misc.
     1. Microtivity IB402 400 point Breadboard for Arduino w/ wires and usb adapter- Amazon- $10.99
     2. Adafruit Break away 0.1” 36-pin strip male header- Amazon- $5.80
     3. Break away female headers- Swiss Machine Pin-Amazon-$5.95
     4. Wall power supply for Arduino- **???-???**

1. Assemble first robot
   1. Put together a programmable robot

* Does not need to be final product
* Can be expanded in future semesters
  + 1. **Before end of semester**

1. Program robot
   1. program to waive
      1. **End of Semester**

* ***Be sure to purchase Club t-shirts from Bruce to represent the Engineering club supporting this project.***