The Plan:

1. Figure out how to control the legs
   1. ~~Calculate the inverse kinematics of each leg~~
   2. ~~Use the slow code to configure the legs’ movement to a point~~
   3. ~~Translate the slow code to the fast code~~
   4. ~~(small) audio feedback for each gait/function change~~
   5. ~~Create new gait generator/gait pattern~~
   6. Persistent body movement (x,y,z)
      1. roll/pitch/~~yaw~~
      2. ~~x/y/z~~
   7. check sensors during gait ~~and flash LED/beep buzzer~~
   8. ~~isp loader~~
2. Combine sensors with step movement
   1. Calibrate the sensors to each leg
   2. Train the hexapod to walk with the sensors
   3. Use the sensors to get the hexapod to safely step over objects
   4. Light an LED when the footing is secure or something
3. Configure Sensors (Delayed for 2 weeks)
   1. Install and determine the values that each sensor feeds to the Arduino
   2. Work on effective gaits in the mean time
4. ~~Failsafe (if the leg can’t touch the ground)~~
   1. ~~Brainstorm ideas~~
   2. ~~Implement them~~

Notes:

1. There is a library for Sharp IR sensors in the Arduino library

Random Notes:

* IR Sensor works with Arduino Uno