Meeting Minutes 3/23/17

Meeting Leader: Garrett

1. Bootloader/programming switches
   1. Jumpers easy way around switches? Or possibly transistor
   2. Not sure of timing for that
   3. Garrett’s been looking at bootloader:
      1. Compile three sets of files that combine (hex file, Nordic, GCC)
      2. Don’t have to recompile it, just have to figure out how to program in
   4. How do you put it on the chip? (Once it’s been included as a hex file)
   5. GCC compiler
2. Board Design
   1. In progress
   2. Get it done by next week’s meeting
      1. Big lead time, can’t wait
   3. Not going to use the NRF board, just the pieces we need
   4. Can connect LCD display using appropriate for display, avoid header pins if possible, look into ribbon cables perhaps (smaller mount)
   5. Sort out how to program bootloader first because you need to have the connections in place for that to occur
3. Bluetooth
   1. All hands on deck at this point
   2. Writing our own, looking for similar projects
   3. Libraries commonly used aren’t compatible with NRF board
   4. RFCOMM sockets BlueZ
   5. Sparkfun library should include commands to let you connect in some way other than phone
      1. May need to go back to Bluetooth primer to look at how to make the connection
   6. Serial: if Pi writes serial command to Bluetooth that is sent to NRF, if you can process that the message is being sent in that works
      1. Have to be careful to not need another microcontroller to read the serial commands, need to be able to send one message across the air into the other device
   7. Are there connection types/classes of Bluetooth that we need to look into to find one that just sends
4. Buzzer
   1. We’re probably looking for a vibrator
   2. Concerned it won’t be able to run directly off the I/O port
   3. Buzzer isn’t enough to vibrate, buzzer is more of an audio alert
   4. Motor for a vibrator needs more energy than I/O port
   5. Schafer doesn’t have any
      1. Need to look for one online
   6. Not hard to do, just need to include in our design
      1. Potentially low sized switch with a MOSFET
5. Additional Questions
   1. All questions have been asked by now
6. Bluetooth cont
   1. Open a connection, write this thing, close the connection
   2. Should be simple
   3. Start by trying to open a stream or socket where one is listening, other is sending
   4. UDP (packets) trying to send one message, maybe just a byte
7. Word of the day: Gibbous

By next week:

* vibrator chosen (ordered?)
* board design complete
* bootloader understood