Working Prototype/Known Problems Report

Tiny House Sensor Network
The Smart Sensor Network Team
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Revision #1

Known Problems:

- Database and UI (frontend) is not yet tied to the sensors and sensor controllers (backend). You can not, for example, send a command to the microcontroller via the website yet.
- The temperature sensor on the prototype has wires that are very close to each other, cause shorts if the wire is moved around, resulting in garbage data (temperature reading of -9999.99 degrees). Move the wires around until a real temperature is printed.
- RX0/TX0 lines on any AVR microcontroller can not be tied to active lines while burning a program with avrdude. Disconnect the XBee or any other UART channels while programming the chip
- XCTU cannot detect or program the XBIB-U development board if the loopback jumper is attached. Physically remove the loopback jumper and retry.
- XCTU sometimes cannot detect an XBIB-U development board without installing FTDI driver or when a port is removed in the middle of use. A computer restart is required in order to address this issue.
- **Do not** include a series of three bangs "!!!" anywhere in the code (strings, program memory, variable names, …) when programming the Arduino MEGA. This puts the chip in developer mode and never gets out. Avoid a '!' anywhere in the code, for the MEGA and not, for this reason. This is due to an stk500v2 bootloader issue. A fix is presented here: https://github.com/arduino/Arduino-stk500v2-bootloader/tree/master/goodHexFiles
- Bug: When entering a time into the dashboard, the seconds gets automatically filled. This can be worked around by entering the time manually into the input box
- Do not press the submit button on empty inputs, this create a console log error that will not be seen if the developer console is not open
- Do not make the browser less than 670px in width because it will cut off the charts from the right side