



Brandon Towell <brandon.towell@gmail.com>

Progress Report 11/3/14

4 messages

Jacob Mickiewicz <jmickiew@pdx.edu>

Mon, Nov 3, 2014 at 2:37 PM

To: Ryan O'Connor <roconnor@pdx.edu>, Brandon Towell <brandon.towell@gmail.com>, Kris Gibbs <kris.gibbs888@gmail.com>

This week I made substantial corrections to the schematic, and made a preliminary PCB layout without power. Corrections include: a frame, debouncing, and programing header.

Still notably missing: functional blocks with clear descriptions, power control, circuitry at the far side of the RJ45's, and a clock.

This is not currently uploaded.

In the coming week I will:

Correct the still missing pieces of the schematic.

Merge schematics and PCB layout with power control.

Finalize PCB layout.

Brandon Towell <brandon.towell@gmail.com>

Mon, Nov 3, 2014 at 6:48 PM

To: Jacob Mickiewicz <jmickiew@pdx.edu>

Cc: Ryan O'Connor <roconnor@pdx.edu>, Kris Gibbs <kris.gibbs888@gmail.com>

This week I finish the prototype for the charging board. I ran through initial tests on the charging portion of the board as well.

Tests ran included:

Full charge, maintaining the full charge via trickle charging, and charging from a half charge

Noticeable flaws in the board became apparent when one battery caught fire and the other one puffed up and expanded in the casing.

Due to this we will be not addressing internal charging, and instead will provide charged batteries to the game to run off and replace as needed.

In the coming week:

Write up the schematic for the PDB for the game and send it to Jacob to add to the PCB layout.

Research and document materials for the enclosure.

Look into mounting methods for the screen as well as what kind of ribbon cable to use to connections

-BT

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Brandon Towell

[\(971\) 217-7102](tel:(971)217-7102)

Ryan O'Connor <roconnor@pdx.edu>

Mon, Nov 3, 2014 at 10:38 PM

To: Brandon Towell <brandon.towell@gmail.com>, Jacob Mickiewicz <jmickiew@pdx.edu>, Kris Gibbs <kris.gibbs888@gmail.com>

Purchased:

- Arduino Uno
- SPI/ICSP USB programmer kit
- 2(ea) of Blue/Red/Yellow/Green buttons
- LCD Display

- 5 ATmega328 uController IC's
- Additional components on order for completion of full game sets less displays.

Built:

- USB programmer to flash ATmega328 via ICSP

Developed:

- Baseline game flow
- Translated game flow into basic program components

To Do:

- Develop individual play components
- Develop game structure and loops to run autonomous of main control
- Establish framework for function interface for collaboration
- Develop working test interface and code for button mechanic

Best Regards,
Ryan

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Ryan O'Connor | Bachelors of Science in Electrical Engineering, Analog IC Design/Layout | Mobile: [503.830.5818](tel:503.830.5818) | roconnor@pdx.edu

Kris Gibbs <kris.gibbs888@gmail.com>

Tue, Nov 4, 2014 at 9:06 AM

To: Ryan O'Connor <roconnor@pdx.edu>

Cc: Brandon Towell <brandon.towell@gmail.com>, Jacob Mickiewicz <jmickiew@pdx.edu>

Progress Report 11/3/14

Last Week:

purchased display
downloaded display library from Adafruit
Read Library and examples
Wrote some test code for the display features of the program.

This week:

Will code the opening game display event for the game
plan the other display code.

-Kris

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