EE / CprE 492 sdmay23-26

Mini-Arcade Cabinet

Client : Brad Yenger
Advisor : Mathew Wymore
3-2-23 to 3-24-23

Team members:

Brad Yenger (EE)
- soldering experience, 3D CAD design, carpentry skills, along with project experience
Liam Tureaud (EE)
-Soldering experience, carpentry, PCB design, electrical work
Alexander Glass (SE)
-Capable coding in Java, HTML, JavaScript, willingness to learn a new skill during the course of this project
David Helmick(SE)
-Worked with many different computer programming languages in many different aspects (simple games, UIs, websites, embedded systems, databases, etc.). Taken both CprE and SE courses so I have lots of knowledge about computers from a hardware and software perspective.
Jeffrey Marsh(SE)
-pretty talented programmer also well versed in video game emulation
Mark Gores(SE)
-proficient in multiple coding languages. Good understanding of operating systems. Good understanding of computer engineering.

Past two weeks accomplishments:

Liam Tureaud - Continued work on LED array. Tested 300 LEDs, planned for setting and soldering of LEDs, and continued work on logic board.

Bradley Yenger - Fixing problems with heat sink on power supply circuit. Soldered the On/Off circuit and have begun testing for problems. Not this weekend, but next weekend will be finishing the construction of the full box. Found a good way to mount the monitor.
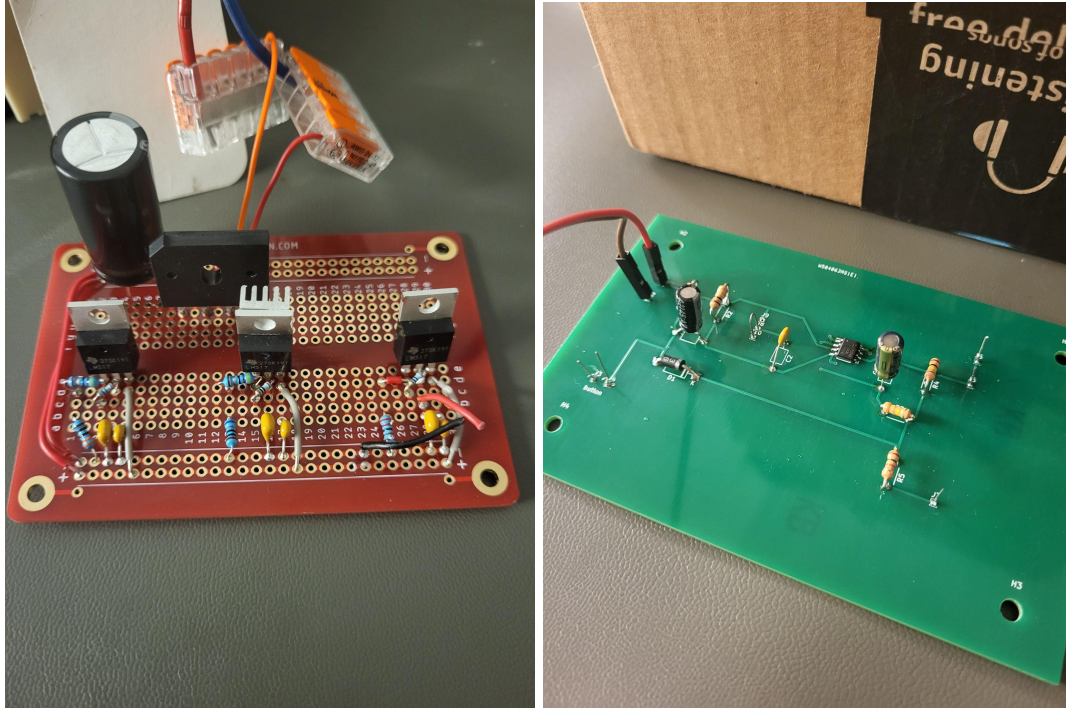
Mark Gores - Preparing for conjoining UI code with the controller program.

Alexander Glass - Continued work on finding limits of the PI and what the highest games we could run.

Jeffery Marsh - Continued work on UI. Had exams one week, but is planning to have the UI 90% done by next report.

David Helmick - Is ready to test the USB uploader, as soon as the UI is ready.

Pending Issues:

Even with a heat sink, the 12 volt regulator is heating up extremely quickly. Solutions ar either find another way to make 12 volt supply or get a much larger heat sink. Maxxing out the regulator at 1 amp.

Name	Hours worked these weeks	Total hours
Liam Tureaud	6	33
Brad Yenger	6	34
Mark Gores	5	36
Alexander Glass	5	34

Jeffery Marsh	4	34
David Helmick	6	35

Next plan of action:

Liam Tureaud - Finish LED matric and logic

Bradley Yenger - Fix power supply, build the box containing everything, and have a safety circuit just in case the on/off circuit does not function properly and can not be fixed.

Mark Gores - With controls done, help other software engineers with anything they may be stuck on.

Alexander Glass - Help Jeffery connect UI to actual controls of the device, also prepare for testing on games.

Jeffery Marsh - Work on finishing UI and starting the games though the UI

David Helmick - Test the USB uploader as soon as possible, then work on any bugs that show up