

EE/CprE/SE 492 Weekly Report

09/28/2019 – 10/11/2019

Group Number: sddec19-23

Project Title: Network Arcade Platform

Client: Joseph Zambreno

Team Members:

- *Evan Mandle: Team Lead*
- *Alex Carpenter: Chief Engineer – Hardware*
- *Bryan Johnston: Chief Engineer – Software*
- *Alexander Schneider – Chief Design*
- *Zach Serritella – Meeting Facilitator*
- *Brian Shanders – Report Manager*

Bi-Weekly Summary:

For these two weeks, the team finalize the game list and netplay and started to work on disassembling the computers to be put in a showcase-ese design. This includes hooking up the hard drive, motherboard, and new GPUs that the team ordered on a board and put on its side for users to see (Fig.1). It was able to communicate with the computer.

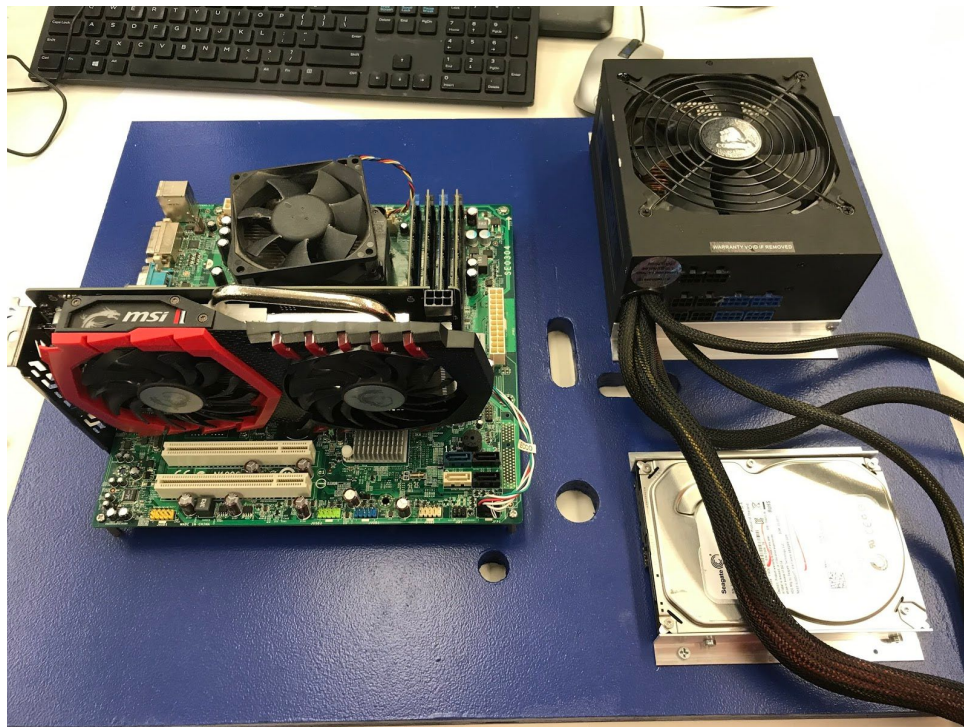


Fig.1 Current Display Board Set-up

Next, the team continued constructing the cabinets as well as painting both of them with 2 coats of blue paints. Also, added wheels on the bottoms for better portability(Fig.2).



Fig.2 Current Cabinet Set-up

To the suggestion of the advisor, the team constructed 2 new buttons start and player buttons on the cabinet that will serve as our “insert coin” function for the games and to quit out of game (Fig.3).

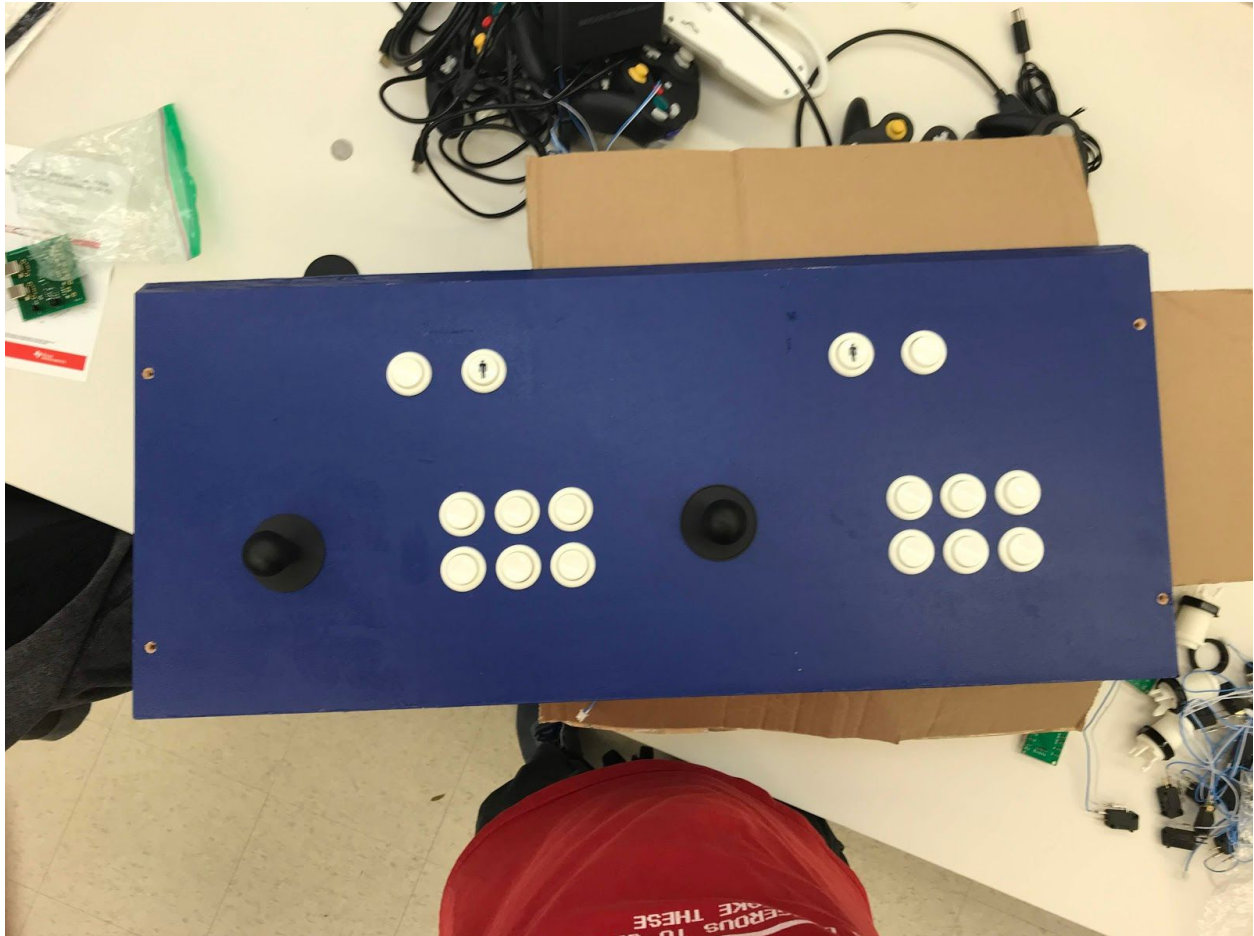


Fig.3 New Button Layout

The team tested the joystick/GameCube controls with the game, “The Simpsons”, and it was able to switch the controls seamless. However, this is only possible due to short circuiting the ti USB MUX, so the team needs to find a toggle switch to flip between the two.

Past Week Accomplishments:

- **Evan Mandle:** Constructed/paint both cabinets. Help Bryan with Display Board
- **Alex Carpenter:** Worked on painting the arcade cabinet along with some assembly of the cabinet. Have a working prototype for switching between two controller inputs for one player.
- **Bryan Johnston:** Created a wood platform for computer mounting. Finish the deconstruction and mounted one of the PCs. Worked with others on sanding and painting the cabinets.
- **Alexander Schneider:** Constructed and painted both cabinets. Configured and wired out button layouts and set them up alongside assistance in hardware installation.

- **Zach Serritella:** Worked painting of the arcade cabinet, doing the 1st and 2nd coat along with touch ups. Worked on the construction of the cabinets. Helped with wiring up the cabinet and installation of hardware.
- **Brian Shanders:** Finished getting games all set-up, assisted with painting and computer disassembly and display board, writing Bi-Weekly Report.

Pending Issues:

- **Evan Mandle:** Waiting on brackets for tv mounting and more paint and protective lacquer to continue hardware. Waiting on Bryan to finish Display boards to start texting networking.
- **Alex Carpenter:** Need to work on getting all four controllers setup on one cabinet with switching between inputs working.
- **Bryan Johnston:** N/A
- **Alexander Schneider:** Need to get cabinet wired up and working. Integrate and determine the final status of controller integration. Determine and delegate out last bits of documentation.
- **Zach Serritella:** Need to work on finalizing the design of the cabinet. Get the integration of hardware and software working smoothly.
- **Brian Shanders:** Since the team is using a new GPUs for the cabinet set-up, don't know if it will affect the games in any way.

Individual contributions:

Name	Individual Contributions	Hours these past weeks	Cumulative Hours
Evan Mandle	*See past weeks accomplishments	12	140
Alex Carpenter	*See past weeks accomplishments	15	118
Bryan Johnston	*See past weeks accomplishments	20	38
Alexander Schneider	*See past weeks accomplishments	16	40
Zach Serritella	Painting, Construction, and Testing	20	50
Brian Shanders	*See past weeks accomplishments	15	45

Plans for the Upcoming Week:

- **Evan Mandle:** Help everyone with their specific duties (Bryan with finishing the display, Alex with USB MUX, and remaining team members with whatever they need help with).
- **Alex Carpenter:** Finish the controls for one cabinet, so that two people can choose to play between two different sets of controls.
- **Bryan Johnston:** Finish working on the display boards, design an acrylic window, and work on the LEDs mood lights.
- **Alexander Schneider:** Complete cabinet wiring and determine remaining tasks on the hardware side. Assist in construction until rigorous testing can be accomplished.
- **Zach Serritella:** Help with testing and finalizing the construction of the second cabinet. Documentation
- **Brian Shanders:** Assist in wire connecting and test games with new GPU

Summary of Weekly Advisor Meetings:

Week 1: The team updated with the advisor about the state of the project. The button layout was fine since there isn't a standard for button set-up, but suggested that to include a way to exit the game and add players using more buttons. Also, was impressed by our color choice and told about a potential circuit design on the sides to match with the menu.

Week 2: The advisor really liked the progress the team made this week. He challenged the team to automate the control switch rather than making a physical switch. He also urged us to think about potential questions the faculty panel will asked at the end of the semester.