

## *EE/CprE/SE 492 Bi-Weekly Report*

*10/26/2019 – 11/08/2019*

*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:**

During the past two weeks, the team had the second Peers/Instructor Review Meeting and updated the progress of the project. Afterward, the team went into potential decal designs for the cabinet, to match with the main menu layout.

With the industry panel review coming up, the team decided to split into two sub-team. One team will be focusing on finishing the software and hardware of the cabinets, mainly with the audio and controller holsters. The second team will work on the final documentation, i.e. final report, owner's and operation manuals, and industry panel review poster.

### **Past Week Accomplishments:**

- **Evan Mandle:** Installed the audio controls, affixed the screen and solved an issue with controllers. Installed hinges for TV and doors.
- **Alex Carpenter:** Installed second USB MUX to switch between controller inputs. Configured and tested switching controller inputs while playing different games.
- **Bryan Johnston:** Created and modified the 3d printed controller mounts. Finished wiring the LED light strips.
- **Alexander Schneider:** Completed netplay configuration; most items are in a presentable and satisfactory state on that end barring specific issues. Began work on Design Document, Owner's and Operations Manual.
- **Zach Serritella:** Help solder the volume control knob. Got the volume control knob cut. Helped with configuration and set up of the MUX controllers. Documentation starts of the design document.

- **Brian Shanders:** Researched HTML commands and worked and updated the layout of the final website. Worked on documentation, mainly with the set-up and info for the poster. Also, wrote the Bi-Weekly report.

**Pending Issues:**

- **Evan Mandle:** Need to take some time and configure the arcade-style controls for all games that use analog controls.
- **Alex Carpenter:** Need to finish up controller switching and configuration. Work on wake-up sensors and wire management.
- **Bryan Johnston:** N/A
- **Alexander Schneider:** Small residual issues with netplay testing; one emulator is not responsive or happy with running in netplay mode, but runs with the netplay core locally.
- **Zach Serritella:** Design document touch-ups, then get a proper design for the control panel design completed and to show the client
- **Brian Shanders:** Need to see if when printing the poster out how small text will be. If too small, need to adjust accordingly.

**Individual contributions:**

<b>Name</b>	<b>Individual Contributions</b>	<b>Hours this week</b>	<b>Cumulative Hours</b>
<b>Evan Mandle</b>	*See past week accomplishments	12	162
<b>Alex Carpenter</b>	*See past week accomplishments	10	143
<b>Bryan Johnston</b>	*See past week accomplishments	10	56
<b>Alexander Schneider</b>	*See past week accomplishments	17	74
<b>Zach Serritella</b>	*See past week accomplishments	18	87
<b>Brian Shanders</b>	*See past week accomplishments	15	70

**Plans for the Upcoming Week:**

- **Evan Mandle:** Configuration
- **Alex Carpenter:** Configuration of controllers and controller switching.
- **Bryan Johnston:** Testing current games and working on the acrylic windows
- **Alexander Schneider:** Complete Owner's & Operations Manual.

- **Zach Serritella:** Design document, the configuration of controllers, testing of MUX and then ordering of new parts
- **Brian Shanders:** Make a proper layout for poster and send it to the advisor for approval, then to ETG for printing, then laminated over at Copyworks. If it doesn't need any changes, assist in other parts in the documentation, i.e work on the PowerPoint presentation for Industry Review Panel.

### **Summary of Weekly Advisor Meeting:**

#### Week 1:

For with week, the team informed the advisor about the status of the project. This included netplay and how the machine was updated to the most recent version of RetroPie and being able to network more efficiently. The team gave more detail on the control holster and its switching property and talked about potential decal design for the machine. The advisor emphasizes the documentation portion as high importance since after the team leaves, a manual needs to be made and show how everything works and how to fix it. Also, put the construction of controller holsters over decals since there needs to be a place to put the controller.

#### Week 2:

The team updated with the advisor about the current state of the documentation, decal and controller holster. The advisor suggested to get the manual done as soon as possible, so he can take a look at it to see if the team missed a detail. Also, advise on the poster to make it less text and to make the words bigger since it is used to give a summary of the project, not a big document. For the control holsters, the advisor suggested making the design thicker for better hold for the Gamecube controllers. Finally, liked the decals for the joystick controls but suggested that the circuit design portion be more transparent or have the label for the controls be more define.