EE/CprE/SE 491 Weekly Report

03/30/2019 – 04/05/2019

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*

Weekly Summary:

On Tuesday, April 2nd, the team had a meeting to discuss what is needed to improve the project plan as a new version is due soon. Also, discuss a potential time over the weekend to work on the presentation for dead week and assign tasks for each member. On Thursday, April 4th, the team worked on the main menu and figured out how to properly modify Retropie to a theme that is appropriate for the arcade cabinet.

Past Week Accomplishments:

- **Evan Mandle:** Was able to get the Linux system to automatically boot into EmulationStation. Successfully was able to hide all boot-up text. This allows for a cleaner/more professional looking product. Read how to configure/customize the main menu. Was able to edit a test portion of the main menu with help from Zach, Brian, and Bryan.
- **Alex Carpenter:** Looked into options for getting the GameCube controller and the analog controllers to be a single input into the PC allowing the user to switch between both controllers while playing. Began work on the presentation for the end of the semester.
- **Bryan Johnston:** Researched TVs, audio, and various subsystems for the arcade machine. With the help from Alex S., created an updated parts lists including links and the most accurate pricing. Also, worked alongside with Evan on configuring a simpler boot up for computer.
- **Alexander Schneider:** Revised first section of Project Plan, renovated Parts List with Bryan. Began work on final presentation for late April.

Component	Source	Appx. Price (Rounded Up)	Quantity Expected	Full Cost	
Audio					
Stereo Amp.	$50.00	$50.00	2	$100.00	ALTERNATE
Audio Arcade Kit	$40.00	$40.00	2	$80.00	OPTIONS
Total Cost				Alternates	
Visual					
32-Inch TV @ 120Hz,1080p	https://www.am	$190.00	2	$380.00	ALTERNATE
Insignia 32" @ 60Hz, 720p	https://www.bes	$100.00	2	$200.00	OPTIONS
Total Cost				Varies	
Outer Casing					
Melamine MDF Board	https://www.low	$30.00	5	$150.00	
Total Cost				$150.00	
Controls					
Suzo Happ 8-way Joystick	https://na.suzoh	$12.00	2	$24.00	
Suzo Happ Pushbutton	https://na.suzoh	$3.05	24	$73.20	
Suzo Happ Player Button	https://na.suzoh	$3.10	4	$12.40	
Gamecube Controller	https://www.gar	$30.00	4	$120.00	
Mayflash 4-Port Adapter	https://www.am	$20.00	2	$40.00	
Total Cost				$269.60	
Power					
Garden Extension Cord	https://www.am	$13.00	1	$13.00	
Surge Protector	https://www.am	$9.00	1	$9.00	
HDMI Cable, 2-pack	https://www.am	$9.00	1	$9.00	
Ethernet Cord	https://www.am	$6.30	1	$6.30	
Total Cost				$37.30	

Current model of the Parts List. There are a handful of additional components that have to be added, which are mostly non-essential to testing & construction.

- **Zach Serritella:** Worked on the main menu and how to customize the system, along with work on the revisions of the project plan.
- **Brian Shanders:** Worked on the main menu, got all of the box art for the games and started work on creating descriptions.

Pending Issues:

- **Evan Mandle:** Need to acquire a capture card to play demo videos of games on the main menu. Brian has one but needs to locate it.
- **Alex Carpenter:** Need to finalize the internal hardware design.
- **Bryan Johnston:** N/a
- **Alexander Schneider:** Has an exam next week.
- **Zach Serritella:** none
- **Brian Shanders:** Figuring out what the final list of games will be so there is no unnecessary descriptions written.

- **Everyone:** none

Individual contributions:

Name	Individual Contributions	Hours this week	Cumulative Hours
Evan Mandle	*See past weeks accomplishments	6	48
Alex Carpenter	Research on getting both controllers to work at the same time for one user. Began presentation rough draft.	5	37
Bryan Johnston	Research parts for the project. Looked into encode designs for the joystick.	5	34
Alexander Schneider	Project Plan part 1 revisions, parts list, presentation skeleton/planning	5	32
Zach Serritella	Main Menu, research and project plan	5	31
Brian Shanders	Main menu, box art, and description, Weekly Report	5	31

Plans for the Upcoming Week:

- **Evan Mandle:** Continue to modify the main menu. Work on end of semester presentation.
- **Alex Carpenter:** Finalize the hardware design and complete the presentation. Work on a prototype of getting one user to be able to use both controllers.
- **Bryan Johnston:** Getting the second pc up and running: this includes installing Linux, EmuationsStaion, and testing.
- **Alexander Schneider:** Finish up parts list, work on presentation, take last pre-finals exam.
- **Zach Serritella:** Work on main menu descriptions, help with the encoder and finish up the revision of the project plan. Along with the presentation.
- **Brian Shanders:** Help out with presentation and finish up with all the descriptions. Also, help revise section 2 of Project Plan

Summary of Weekly Advisor Meeting:

      The team talked with the advisor and provided an update to the project. The team talked about the status of the main menu, sensor application, and idea for encoder using a Teensey Board. The advisor suggested more research on our arcade controls, seeing if the joysticks and buttons are digital or analog and see if it affects the encoder. Also, when it comes to the description of each game, the advisor thought of an automation system that will gather data from sources online and present a new interesting fact everything you display the game. Finally, talked about power and having one power button that turns on/off everything on the arcade cabinet.