

## *EE/CprE/SE 491 Weekly Report*

*02/23/2019 – 03/01/2019*

*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:**

This week, the team tested out the computer that was bought at the ISU Surplus store. It was tested to see if it can run the programs that will be used for the project and games. This resulted in finding out that the system was too weak to run at the optimal level the team is aiming for. With that, the team ordered a custom desktop from the ETG shop that will make sure the programs can run and can start testing. Also, work on the design of the main menu is underway and began testing on games to set benchmarks for quality. Finally, the reason why there wasn't a weekly report last week was that the team was focused on completing the first version of the project plan.

### **Past Week Accomplishments:**

- **Evan Mandle:** Made a list of expected inputs/outputs for the system. Drew a diagram in regards to the input/output. Installed emulators on the system. Installed GPU drivers. Researched Linux commands and coding.
- **Alex Carpenter:** Began work on the design document assignment, created an emulator start guide and researched the legal issues of using RetroPie in our project.
- **Bryan Johnston:** Worked on setting up the older computer system. Communicated with ETG.
- **Alexander Schneider:** Installed benchmarking/resource intensive games & programs. Created benchmarking specifications. Determined compatible emulators.
- **Zach Serritella:** Made some additions to the design documentation. Help with research on possible parts and or software.

- **Brian Shanders:** Researched different menu styles/customization for arcade cabinet(mainly RetroPie and Lakka) and how to properly code it.

**Pending Issues:**

- **Evan Mandle:** Haven't fully decided what all inputs are going to be. Only have audio and visual outputs on the diagram. Need to expand on that.
- **Alex Carpenter:** Researching and familiarizing myself with the RetroPie environment. Design document will need more research.
- **Bryan Johnston:** Obtaining various arcade ROMs for the system in a timely manner.
- **Alexander Schneider:** Upcoming exams & papers due next week, need to benchmark test all platforms and see what is feasible.
- **Zach Serritella:** Figuring out how to code the main menu, watching some videos on that.
- **Brian Shanders:** Studying for a midterm exam, haven't figured out what specific settings/design to go with for the menu

**Individual contributions:**

<b>Name</b>	<b>Individual Contributions</b>	<b>Hours this week</b>	<b>Cumulative Hours</b>
<b>Evan Mandle</b>	Researched Linux commands to learn how to install programs and drivers. Created input/output diagram	5	17
<b>Alex Carpenter</b>	Worked on design document and created an emulator start guide.	4	15
<b>Bryan Johnston</b>	Contacted ETG and set up the new computer system. Assisted in installing/uploading the emulator/ROMs	5	15
<b>Alexander Schneider</b>	Prepared benchmarking testing and resource-intensive games.	4	15
<b>Zach Serritella</b>	Design Documentation	4	15

<b>Brian Shanders</b>	Researching on menu customizability, weekly report	4	14
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### Plans for the Upcoming Week:

- **Evan Mandle:** Work on breaking down the current model into smaller components and researching how other arcade cabinets have been constructed.
- **Alex Carpenter:** Continuing work on the design document and learning more about Retropie.
- **Bryan Johnston:** Have most of ROMs that will be used in the final design uploaded to the system. Research menu customizations.
- **Alexander Schneider:** Benchmark testing of all platforms, assist with the design document.
- **Zach Serritella:** Continue to work on the Design documentation. Then learn more how to code in Linux and try to layout the main menu.
- **Brian Shanders:** Start designing/programming the menu, assist in the design document

### Summary of Weekly Advisor Meeting:

Was unable to meet up with advisor due to scheduling conflicts. Report Manager will send an update to the advisor about progress on the project.