

EE/CprE/SE 4910 WEEKLY REPORT 9

11/25/25 - 12/2/25

Group Number: sdmay26-40

Project Title: True Force Technologies Arcade Rack

Client: True Force Technologies

Advisor: Matt Post

Team Members/Role:

Jacob Garcia - Frontend Development

Dylan Longlett - Frontend Development

Andy Drafahl - Team Manager, Frontend Development

Fadi Masannat - Frontend Development

Sofi Gutierrez - Backend Development

Parnika Dasgupta - Backend Development

Colin Yuska - Electronics

Weekly Summary

The team took on several different tasks over the Thanksgiving break, including backend documentation, LED board configuration, arcade music production, animation proposal writing, React UI development, and whatever else needed their attention. Because the team is in such a good spot progress-wise, they are now shifting their focus to the faculty panel and making sure the design document is up to the expected standards. The team acknowledges that this is not necessarily project work, and instead would be regarded as class work, but the team has put in their hard work to get to a point where the only logical move is to make sure they're fully prepared for the panel.

Past Week Accomplishments

Jacob Garcia

- Went through the code and organized it for readability wise
- Overviewed the final presentation
- Worked on the website to prepare for the final presentation.

Parnika Dasgupta

- Reviewed the code Sofi converted to JAVA
- Researched about and found some ideas about how to create a printout of the leaderboard from the database (like the client wants)
- Made the team presentation for the faculty panel

Dylan Longlett

- Got ready for final presentation.
- Ported game to Raspberry Pi
- Continued implementation

Fadi Masannat

- Worked on UI and Added another screen
- Studied API integration and how to use Sofi and Parnika's APIs into a clean Service Layer on the app to adhere to architecture.
- Researched the most efficient ways to integrate Dylan's python code with app or keep them consistent where necessary

Sofi Gutierrez

- Created all the API routes, controllers and repositories for the backend
- Included a README with details of the setup of the backend and how to set it up.
- Worked on connecting the database locally and then testing the API's routes to ensure everything is working.

Colin Yuska

- Updated Pinouts for GPIOs
- Researched similar projects on Arduino
- Continued testing STM Board

Andy Drafahl

- Finished animation proposal document.
- Learned how to use Furnace Screen Tracking software for creating authentic video game music for the arcade game.

Individual Contributions

Team Member 1: Worked on... Team Member 2: Team Member 3: ... o Individual contributions (Creating this section is optional, but it is Required to include the "Hours Worked for the Week" and their "Total Cumulative Hours" for the project for each member somewhere relevant in your report. Your individual weekly hours should be at a minimum of 6-8 hours for this course. So please manage your time well. Also, ensure that individual contributions support your claim to the weekly hours. Be honest with the reports. **DELETE THIS DESCRIPTION WHEN FINISHED]**

Name	Individual Contributions	Hours This Week	Hours Cumulative
Jacob Garcia	- Got ready for final presentation.	4	53
Parnika Dasgupta	- Reviewed updated code - Researched how to get printouts from the database - Made faculty panel presentations	7	35.5
Dylan Longlett	- Got ready for final presentation. - Ported game to Raspberry Pi - Continued implementation	5	45
Sofi Gutierrez	- Converted backend from PHP into java with spring boot framework	10	50
Colin Yuska	- Updated Pinouts for GPIOs - Researched similar projects on Arduino - Continued testing STM Board	12	47
Fadi Masannat	- Reviewed main branch and current working branch - Presentation preparation - API integration and planning	4	45
Andy Drafahl	- Finished animation proposal doc. - Spent several hours learning how to use Furnace for making arcade game music.	7.02	47.64

Plans for the Upcoming Week

Because the faculty panel is so quickly approaching, the team will be largely focused on prepping slides, practicing the panel discussion, and polishing their design document. The team members also had the option to pick up additional responsibilities, but it's likely that their time will be taken up by prep.

Parnika Dasgupta

- Wrap up the backend so that we have a working system that we can show the faculty panel
- Help the team wrap up other parts of the project that need more work before the faculty panel presentation

Dylan Longlett

- Get ready for final presentation
- Continued implementation

Jacob Garcia

- Finish up the website to adhere to the final website update specifications.
- Overview the final draft of the design documentation.
- Practice for the final faculty presentation.

Sofi Gutierrez

- Will continue on ensuring all API routes work and that the database works using postman and MySQL workbench database
- Prep for the faculty panel

Colin Yuska

- Shift gears to making project a functional example on a Arduino board instead
- Create graphics to show future shift over to STM board
- Prep for the faculty panel

Fadi Masannat

- Meet with Sofi and understand the backend structure and creating the APIs and CRUD operations
- Push new UI to main once its fully polished
- Prepare for presentation
- Create graphics to show future shift over to STM board

Andy Drafahl

- Revise design document
- Prepare slides for the faculty panel
- Practice for the faculty panel

Summary of Weekly Advisor Meeting

We did not have a weekly advisor meeting this week because of the snow day on campus, which occurred when our usual meeting would take place.