

Personal and University Projects

This is a portfolio of some of the most significant personal projects and university related course projects that I have undertaken.

Due to the nature of university and academia, some project codes can not be publicly uploaded to GitHub. However you can privately message me if you want like to see the code.

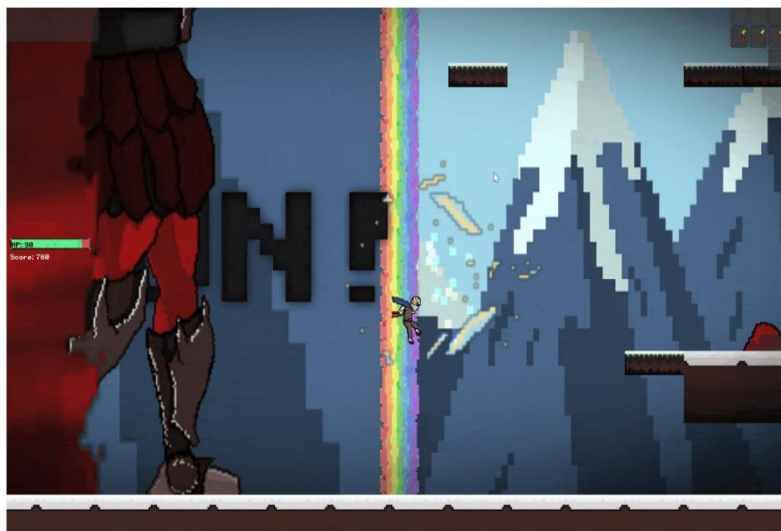
Space Themed Holiday Website

Type: individual Timeframe: 2021-semester 1

As a part of a design course, I enrolled in, we were required to develop a website with the theme of holidays. I created the website using pure HTML, CSS and JavaScript. I learnt a lot about UX design and HCI (human computer interactions) from this course and I am very proud of the website I created in the end. The website features multiple webpages and all the images used were either self-created or royalty-free. Other than form validation and a simple quiz, no backend process was considered as the onus of the course was on design.



Please check out the website at: <https://peter-tr.github.io/>
and the design portfolio and code at: <https://github.com/peter-tr/peter-tr.github.io>



"Ragnarök" Endless Runner Game

Type: team Timeframe: 2021-semester 2

In the second semester of 2021, I partook in a course where the objective was for the whole class to work on and develop a game. This was called "Ragnarök" and was written in Java using the Libgdx game engine. Using the link below, the game can be cloned and played. My main contribution to the game was the main enemy, bug fixes, special effects and documentation in wiki.

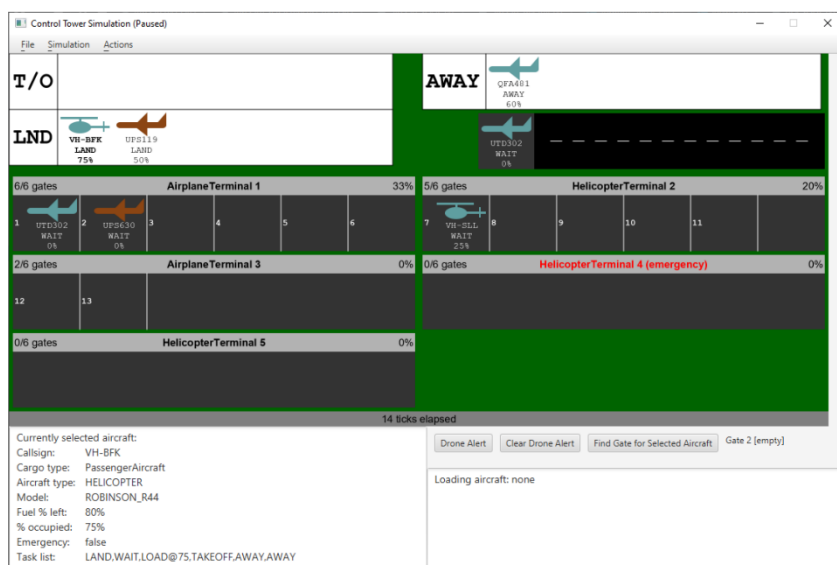
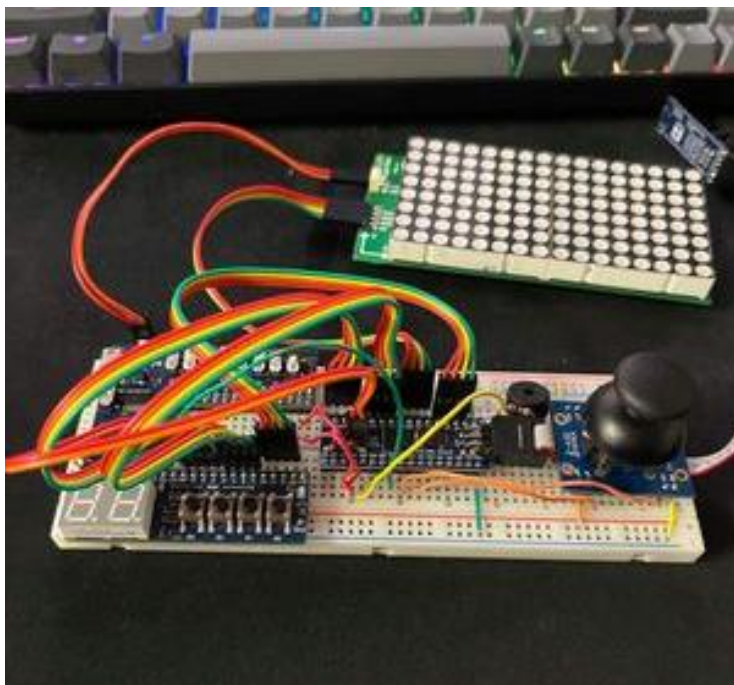
You can see what I actually did by looking at the commit history for my GitHub tag 'peter-tr'.

Please check out the game and code at: <https://github.com/UQdeco2800/2021-studio-1>

"Reversi" game on ATmega324 Board

Type: individual Timeframe: 2021-sem1

This project involved creating a replica of the board game 'Reversi'. Reversi is a turn-based game played between two players on an 8x8 board. This project came from a electronic course that taught C programming and computer systems. The game was programmed using C language onto a ATmega324A microprocessor. Although this course was very difficult as computer systems and electronics are new to me, the course was equally as rewarding as I learnt so much from the experience.



Airport Simulator

Type: individual Timeframe: 2021-sem2

An Airport Simulator was created as part of an introduction to Java Course at university. This course taught me the basics of Java and the assignments were to create a program given it's Javadoc documentation. All the specification of the planes, terminals and gates were given, and it was up to me to create the GUI and respective classes and entities.

“Pokemon” themed Minesweeper Game

Type: individual Timeframe: 2020-sem1

For the final assignment of my first coding course in university, I recreated the game Minesweeper in python with a “Pokemon” theme. The game was created from scratch, including the front end aspects (GUI, layout) and the back end processes (mechanics, file system). This course was my first real usage and experience with python and taught me a significant amount about the software design process. The game worked perfectly and featured an interactive GUI and the player’s progress can be saved to a file and loaded.



Top-Down Shooter Game

Type: individual Timeframe: 2019-sem1

During high school, as part of a personal project and school assignment, I created a web-based game that was basically a top-down shooter. As my first ever coding project, I relied heavily on the fun and fast JavaScript game engine called Phaser. Although the game had a lot of bugs, this project is what sparked my interest in software engineering. Throughout the process, I gained experience with CSS, HTML and most notably Javascript.

