

CGRA151 Project Report
Student name: Thomas Green
Student ID: 300536064
Name of game/artwork: Breakout

Vision

The idea of the game is to remove the bricks without losing/dropping the ball. This is a redraw of the game Breakout. The vision of this game was to have three levels and as it moves from level to level more bricks would appear for the player to hit. You control the ball using a bat at the bottom, which the ball would bounce off of. The ball also bounces off the walls and ceiling however if it passes below the bat then you will lose a life.

Achievement

There were several ideas that I had for this game. Most of it I discovered to be very advanced quickly as well as processing not handling well. I love music in movies and I wanted to have music/sound effects in the game. Sound effects/music files when playing the game would cause the frequency of the mp3 file to increase causing a 'very unpleasant sound'. Instead, I just have a main looping song throughout from a James Bond movie (guess which one). Another was to implement colour control across the blocks, something that took a lot of googling and debugging to do. The level design was another one, however, turned out to be very simple.

Technical Challenges

Challenges for me were level design and layout of when different variables come into play as the levels progressed. For example score and life design. Another was the bricks colour template, however, this was a lot of fun. I did play around with sound effects for a long time, however, having multiple audio files was not fun for my ears after a while. The main challenge I was aiming for was to write spread-out code that would be easy to add onto if I wanted to progress my game further. The reason for me doing this was that I wanted to see if I could recreate a basic game with at least as help as possible that would create a robust and stable game. This was my main challenge and goal in this project.

Reflection

My love for games comes with art design and immersion. If I wanted to take my skills further I would love to work at a company that takes such care in their gameplay and audio design. My plan for this project was to make a stable Processing game and use the Java skills I have learned this year to make a basic game. From here I wanted to go on to add some things we haven't necessarily worked on yet throughout the assignments. Examples of these were the sound, and colour design of the bricks as well as the timer. In the end, my game is meant to be finished very fast passed since it is meant to be completed over a timeframe, which can be very fast-paced and stressful which is what I love in a game. I love music as well so being able to implement a song within in it to fit the vibe of being futuristic with the backgrounds was very cool for me. In contrast to my original plan the challenges/additions I wanted to make weren't the ones, I ended up doing. Design on the balls being able to do different things, e.g. faster velocity/powers weren't implemented Instead I added two balls which adds to the difficulty of the game concerning your lives. I the main base of the game I made very quickly which felt good as I knew how to design a game that would be easy to add and debug. Adding in the other technical challenges was fun since I knew that I had created a good rock to build around which was something I hadn't done throughout the second and third assignments. If there was anything I could've done differently it would've been adding in more gameplay. For example ball upgrades, high-score (thinking about it now it would've been really easy), moving backgrounds, and more sound (this was deemed impossible in processing due to its sound libraries and stability).