

Game Engines

Task 4

Phase 0: The first thing I did was to research what game I wanted to design. This had to be a simple game with simple mechanics, but at the same time I wanted a game which I was passionate about. My first thoughts was to design a retro game, but after doing some research, I came across the game "Bubble Struggle", that *Brackeys*, (a youtuber that does tutorials), did a livestream of and this was one of the first games that I ever played on a PC when I used to go on *Miniclip*, so I decided to do a replica of it (for nostalgia's sake).

Phase 1: After deciding on what game I wanted to replicate, I started think about the theme of the game. The mechanics of the game were quite simple, use left or right arrow keys and press space to destroy the balls before they hit you which is why I decided to focus on the game theme first. Knowing as well that the game did not need to have a story (since I mostly wanted the game to be based on the experience of play and defeating the game) also helped make the game simpler to design and be flexible with.

Phase 2: I decided to go with a theme that I like (dark and includes wolves in it) to make it even more enjoyable to design. After I finished my design brief and have some reference images of how the game would look like, I started coding it, arranging any errors along the way (Agile Scrum model) and this worked out great for my project and would definitely use this model again.

Phase 3: After I finished coding the game and was error and bug-free, I did some last-minute adjustments of the game and simply built it for PC, Mac & Linux.

Problem encountered: Knowing when the game was won.

For the game to be won, I took the approach of creating a ball counter and had to count all the balls in the game manually. For a simple game like this, it was manageable, but I am pretty sure there is a more efficient way without the need to count the balls yourself and if I decided to add more balls, it would become harder to keep track.

A few things which I would like to improve on for next project:

- Better design and better contrast between objects
- Make the game more challenging, perhaps include more levels and include more objects, such as more balls (certain balls are faster than others). With the addition of more balls, the game becomes harder and therefore it would be fun to include resources in the game to help out the player.