

COMP222 Assignment 1 Report

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1 Modelling the environment: Completed

2 Physics: Completed

2.1 Ball motion and collision: Completed

2.2 Removal of physics entities: Completed

3 Keyboard interaction: Completed

4 Gameplay: Completed

5 Extra: Completed

Extra description:

This section will be broken down into sound effects, textures, green balls with multiple lives and more interesting physics.

First, I will begin by speaking about the added sound effects. I chose to add 2 different sound effects, one for the red player ball bouncing off the surfaces such as the walls or the paddle; one for the red player ball colliding with the green balls to display that a hit is detected. I used the jMonkey sound effects for this which can be found in a number of tutorials online. I used the Beep.ogg sound effect for hit detection and the Bang.wav sound effect for the bounce detection.

In terms of textures, I added the splat texture from the jMonkey Textures library to the paddle and walls. I also used a variety of colours for different materials such as the walls being Magenta and the paddle being Cyan.

I also chose to implement a dynamic to the second level, where there were 3 balls which had multiple lives. On the second level, there are 10 balls in a pyramid shape, where the 3 balls on the second row from the top, had multiple lives. Their life counts were 3, 5 and 7. This added a level of complexity to the game. These green balls displayed their life count with a yellow number on them, which represented the remaining number of lives for the balls.

Finally, I will speak about the more interesting physics. As suggested in the task description, this could be an optional added feature if you allow the balls to change their linear velocity if they are travelling too close to the horizontal line. This was a feature that I also decided to implement. I simply calculated a new linear velocity for the ball if their linear velocity was between -0.25 and 0.25.