## Written Documentation

Our concept entailed a simple game where the user must combine timing, skill and luck. The game involves the user having three rotating balls and targets appearing randomly on the screen. The user must then aim the correct colored ball at the matching target. When the user hits the correct target, they score a point, the player has 10 balls of each color.

The purpose in the interaction was simply to create an enjoyable yet challenging game for the player.

We decided on this game from our initial idea of a game where you shoot fireworks and watch them explode. From there, we decided to create a more interactive experience with the game and player. Our interactivity in this project involved the player actually having to focus to hit the targets, if the timing and focus is not right, then the chances of hitting targets are significantly lower.

In our project, we used the JavaScript library PIXI to facilitate our creation of the game. PIXI is a rendering engine which facilitates rendering our sprites into the game. The targets and balls are sprites and the library made it easy for us to put in the sprites and use them with collision detection. The library also has built in functions which helped us manipulate the sprites to ease our design choices within the game. One function for example, was pivot and anchor, pivot and anchor made it so that the sprite rotates on a certain point, that is how we manipulated it so that the triangle rotates around the balls. Other functions in the PIXI library aided us with the little details, when hovering over the balls, the mouse changes, PIXI gives you the ability to separate the code into three parts, the setup, play and functions loops, which helped us keep organized.