Additional Features

1. **Shooting** – My game has a shooting feature implemented which was not implemented within previous versions of my game. It allows the player to shoot enemies and successfully destroys them. The shot also gets destroyed when hitting objects that cannot be destroyed which prevents the bullets from remaining there after they have struck any object. My boss is also capable of shooting and its shooting is integrated with the FSM system made for him. Details of this will be found below in the FSM section.

2. **FSM** – My game includes an FSM system that allows the boss to detect where the player's location is and it will move accordingly. This means that if the player is to the left of the boss it will move left and if the player is to the right he will move right. The shooting function has been integrated into the FSM, which means that when the player is to the boss' right, he will shoot right and when he is to the left, it will shoot left.

Coding challenges

One of the big challenges was getting my shooting to work correctly. I was initially unable to shoot both left and right and I was unable to and I was unable to make my boss shoot in the direction of my character. This was solved by creating variables that specified the direction that the player or boss was facing. The shot was then fired in that direction. The player controls the direction that the main character is facing and the direction he shoots in. The FSM determines the direction that the boss is facing and shooting in.