

Project Title:

# Block Game

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# Introduction to Game

Our aim for the game, is to shoot the enemy which is on the screen. The blue block is the character which the player will be controlling, which the red block is the enemy which the player is trying to shoot.

## Features of the game

The features which have been coded within the game, are shooting, movement, reloading the game and collision.

The shooting feature within the game has been coded for when the player presses ‘spacebar’ the blue block will shoot, from its left side, a small red block. If the player hits the red enemy with the shot the enemy will die.

The blue block has been coded, for its movement controls to be the up, down, left, right arrow keys on the keyboard. The movement speed of the player is much faster, compared to the enemy, making the game easier to play.

When the player successfully hits the red block with the shot, the game will pause and allow the player to start again. The player can start again by pressing the ‘Start’ button at the top of the screen. As seen here on the right.

The collision feature within the game, makes the red block follow the player to try and get closer.



# Design

## Initial sketch ideas for the game

This is the initial sketch idea for the game. The idea was that the wizard, the character which the player will be controlling, will be shooting waves of enemies.

A score bar is also shown at the top of the screen too.



## Comparison for final idea



# Development process

When it came to the development of the game, we decided that Immanuel was going to code the game, and for me to do the presentation.

The issues which came up whilst coding the code, was the collision system not fully working. For example, when the red block touches the blue block the player does not die, but instead the red block rapidly moves within the blue block.

An other issue which happened whilst coding the game, is that the blue block would not shoot. Leading to the entire game not working. This issue was overcome from changing the shooting button to spacebar, from double pressing left.

```
}  
if (code == KeyEvent.VK_SPACE) {  
    cubeX = x + (width/2) - (cubeWidth/2);  
    cubeY = y + (height/2) - (cubeHeight/2);  
    repaint();  
}
```

# Demonstration

Present the game and its functions.



Start



## Evaluation

What we believe went well whilst coding the game, is that the game is able to run and play.

We could improve the game next time by adding avatars to the blue and red blocks. This will bring more life to the game and overall improve the experience for the player.

What we have learnt is that, coding a game requires a lot more time, to finish and make sure it is fully working.