

# CS171 Semester 1 Project Description

## Last Stand

For the first semester project, I decided to make a game called *Last Stand*. The aim of the game is for the user to shoot at targets that are heading towards the user in which their purpose is to get past the turret, the user fights back to stay alive and can lose lives when enemies pass the turret and lose the game when all lives are lost. The user is able to move left and right but not go upward or downwards. The user controls a turret that can shoot projectiles at the enemies coming towards him. The enemies will vary in size, speed, health, and characteristics. The enemies will be programmed to make the user lose lives when they pass the turret, specific enemies will have more health but be slower than others in order for there to be balance. Some enemies will have shields that need to be destroyed before dealing damage to the actual enemy.

The program will also display the score at the top of the screen along with the user's lives and time lasted to showcase how long the user lasted before losing the game. The user can lose a number of lives, depending on how many targets pass the turret that is not supposed to be crossed. The program will close if the user loses all lives. For the movement of the turret, frameCount will be used, similarly to the ping pong game made recently, where the user would slide the turret across the bottom of the window constructed and fire projectiles at the incoming targets. The projectiles fired will be single shot. The program would also include a menu screen before the user can begin the game, for example, the user would need to press the key that they are told to press in order to run begin the game. A countdown screen would follow after the menu screen. When the game ends, I will attempt to add another menu to showcase a display, stating that the game is over.