**Crusade Lucifer**

This is a game of shooting. Player can use UP, DOWN, LEFT and RIGHT to control Uriel. Press C can shoot bullets. Player should avoid yourself from hitting by enemies and the purpose of this game is beating the boss – Lucifer, who used to be an angel; however, she is fallen and become a devil now.



**How it works**

Basically, the functionality of the game is based on five classes – Player, PlayerBullet, Lucifer, Monster and Timer.

**Player**

There are three mina purposes of this class.

1. To draw and position the player - Uriel.

display() to show image here.

setPos() to get the position of the player.

1. To judge whether the player is hit by monsters or not.

Boolean collide(Monster m) {

Return dist(x, y, m.x, m.y) < 50

}

**PlayerBullet**

1. To draw and position the Bullet of the player

display() to show image.

setPos() to get the player’s position.

**Lucifer**

1. To draw and position the boss of this game – Lucifer.

display() to show image here.

setPos() to get the position of the Lucifer.

1. To judge whether the bullet of the player hits or not.

Boolean collide(PlayerBullet b) {

Return dist(x, y, b.x, b.y) < 200

}

1. Set the HP for the boss. Player should hit the boss 20 times with bullet, or the game will not over.

hp() {

if (collide) hp -1;

}

**Monster**

1. To draw and position the monster.

display() to show image here.

setPos() to get the position of the monster.

1. To judge whether monsters are hit by the bullet of the player or not.

Boolean collide(PlayerBullet b) {

Return dist(x, y, b.x, b.y) < 50

}

1. To judge whether monsters hit the player or not.

Boolean collide(Player p) {

Return dist(x, y, p.x, p.y) < 50

}

**Main**

**Setup()**

1. Set the window size to 600 x 1000 pixels.
2. Creates a player object from Player class.
3. Creates a monster array from Monster class.
4. Creates a boss from Lucifer class.
5. Creates and starts timer (total timer) form Timer class.
6. Creates a timer for Lucifer and it will start to calculate after 90 sec that the total timer count.
7. Set the playerbullet array.

**Draw()**

1. Global variable gamestart and gameover is set for the stage changing. Click the window can start the game (gamestart become true). When the player is hit by monster, the game is over (gameover become true and print “game over” on the screen). After the gameover become true, you can click the window and start a new game (game over become false).
2. When the gamestart become true, the timer (totalTimer) start to count and the Monster class will create a monster every 2 sec.
3. If player is hit by monsters or the boss, the variable gameover become true and this game is end.
4. If bullets of player hit monsters, the array of monster will decrease 1 and if bullets hit boss, the hp of the boss will decrease 1.
5. When the hp of the boss becomes 0, the player will get a victory.