Survival Under Covid-19 - Jennifer Zheng, Lynn Zhou

We plan to design a game called Survival Under Covid-19, it is similar to Battle of Balls but with only one player.

#### Features:

### Map:

The size of the map will be bigger than the display window. Display should move as the player moves itself out of the current display area.

#### Level of difficulty:

There will be Easy, Medium, and Hard levels. Each level will have a respective amount of enemies and obstacles.

#### Food:

Small dots of the same size(diameter of 5 pixels) would randomly generate on the map as food of the player and enemies. As the player and enemies eat the food, they will grow bigger. The dots will disappear after being eaten and then be regenerated on the map after a while.

#### Obstacles:

There are two kinds of obstacles, they both stay at fixed positions.

### Obstacle 1:

Image of a mask. The player can eat the mask and gain 10 points. Enemy would die(disappear) if it touches the mask.

### Obstacle 2:

Image of a party (or other forms of large gathering). Enemy can eat the party and gain 10 points. Player would die if it touches the party (Game over).

# Score:

Each small ball represents 1 point, each enemy at start of the game represents 5 points. Each time a player eats one small ball, the player gains 1 point. Each time the enemy eats one small ball, the points of the enemy increases by 1. When the player eats an enemy, the player gains points that the enemy represents.

### Plaver:

Player will be displayed by the image of the human figure with a diameter of 10 pixels in the middle of the map.

Points of the player will be displayed in the middle of player ball, player starts with 5 points.

Movement of the player consists of left, right, up, down keys.

Each time the player gains one point, the diameter of the player ball increases by 5 pixels.

If the player bumps into an enemy that is larger, the player would be eaten by the enemy and the player loses.

If a player bumps into an obstacle, the player would die and game over.

For the player to win, he needs to clear all enemies from the map.

# Enemy:

Enemy will be displayed by the image of the coronavirus.

Starts with circles with a diameter of 10 pixels.

Points of each enemy will be displayed in the middle of the enemy ball, enemies start with 5 points.

Balls of 5 points randomly generated on the map. Each time an enemy gains one point, the diameter of the enemy ball increases by 5 pixels.

Enemy moves randomly.

If an enemy runs into an obstacle, the enemy dies(disappears).

If an enemy runs into a player(larger or equal), the enemy gets eaten by the player. Countdown for the number of enemies left will be displayed.

## Drawing:

