

Assignment of Game

This assignment is based on the demo we provided, but you can also replace it with a demo designed by yourself. No matter which demo you will use, your demo should have the following requirements:

- At least two scenes : start, game/level1.
- In game/level1 scene, it should include three type of walls:
 - Blue wall: will not move after collision
 - Yellow wall: will move after collision
 - Red wall: fail the game after collision
- In game/level1 scene, it should include at least five type of food. And it will be disappeared after collision.
- A third person player can be moved by clicking 'A', 'S', 'D' and 'W' key, and rotated by moving the mouse in game/level1 scene.
- In game/level1 scene, It should include a UI to display the points and time.
- Should design a judgement of game victory and defeat and it should be displayed in page.

To Ensuring that the requiriements above can run normally, if you complete any of following requirements, you can get **20 points** for base part.

Additional Requirements:

1. Add backgroud music on `level1` scene, and it will play backgroud music again in each time you enter the `level1` scene. **10 points**
2. Give different points to different fruits, and when you get a fruit, add its own point and then display the total points on the screen. **10 points**
3. Implement Jump function. **10 points**

Look at Player.cs

4. Add additional UI in `level1` scene: Click `ESC` key, and then a setting window will be opened. In the window: **20 points**
 - Change the moving speed of mouse.
 - Add return button and click it to return to the `start` scene
5. Add opening door operation: Design a user defined door in level1 scene, and when the player goes front of the door, clicks `E` key, the door will be opened. **30 points**

How to check this assignment?

Checking time: Only in lab course.

Checker: Your own lab teacher or student assistants.

Checking Deadline: The **sisth week** of the your lab course. Oct. 23th to Oct. 25th

Checking process: Run your program to your teacher or student assistant, and the checker would give you a grade. We will give you **two opportunities** for this assignment. If the two opportunities are exhausted, we will take the second grade as the final grade of this assignment.

It is also an elective assignment, and we have another two elective assignments(font-end and back-end). We only mark the grade of these elective assignments for once time, and the final grade of elective assignment is the highest of those three.