

CS427 - 3D Visualization and Game Development

Mini Project 01 – 2D Games

I try to include all 2D techniques being taught in this project, though it is still seemed very simple.

Some detail information about the game:

There are 3 different soundtracks for the UI Menu, Level 1 and Level 2.

The UI Menu:

- Motion background
- Sonic appears when hover on START using trigger.
- Click START will direct to Level 1.
- Sprite animation is used.

Level 1: Play with Keyboard:

- The objective is to move the Donut so that it can touch the Bee, try not to let it drop to pitfalls. Success will lead to Level 2.
- Stoneman will appear on the right. It uses left and right arrow key to move, space key to jump, can jump repeatedly.
- Click the 2 Players button then another Stoneman would appear at the left. This character can be control by A key to move left, D key to move and Q key to jump.
- Can press Menu or Restart as pleased.
- Finite state machine for moving characters.

Level 2: Mouse:

- In this level the bird can collect as many eggs as it likes. There is no stopping condition, and the score system is not available now.
- Bird moves toward cursor of mouse when clicked.
- The planet will turn around following the mouse direction.
- The Main Camera will move when cursor it is at the edge of screen.
- Eggs disappear when being touch by bird, using Collison technique.
- Base on mouse position that character would flip correspondingly.

My biggest reference is from Mr. Dat Thanh Youtube's channel. There are still problems that I looked up on the Internet.