

Assignment 3

/*Config Description */

Obstacle_level1: the obstacles attributes for level 1

Obstacle_level2: the obstacles attributes for level 2

numLives: number of lives can be lose

/* Completed Functions */

1. User control of Background moving
Press LEFT moving backwards, press RIGHT moving forwards, release Key stop moving.
2. Adding concept of losing and winning
Specifying numLives in config file, when hitting obstacles losing one life, run out of lives game failed and restart. Successfully dodging a specified number of obstacles game succeed.
3. Paying score throughout whole game
A score showing how many lives has been lost, when reach numLives specified in config, print a string: FAILED! Restart!
4. 4 type of powers-up
Press G immune obstacles, press N change to normal mode, press L can jump higher, press T to tiny size.
5. Chain of Responsibility as Behavior Design Pattern
Applying Chain of Responsibility to each Key Press events, used in both controlbackground.h and livesjumpingstickman.h

EventHandler.h -----> General events handler, the super class

LeftHandle.h -----> handle Key_Left press event

RightHandle.h -----> handle Key_Right press event

GaintMode.h -----> handle Key_G press event

LargeMode.h -----> handle Key_L press event

TinyMode.h -----> handle Key_T press event

NormalMode.h -----> handle Key_N press event

6. TestFrame
 1. ScoreTest & loseLifeTest -----> stickman hitting obstacle loose one life and showing score on screen.
 2. UserControlTest ----> when no key press, no moving for background.

