Dodge game

by Hongtao Li, Johnson Wang

Description

this is a game that challenge the player that how long it can stand facing the enemy all around. it have a certain hp(now is 5). Once his hp lower than 0, the game is over. as the time went on, the number of enemy will increase

Found

what we have find in this project is how the JFrame and Jpanel work and how ActionListener work. also briefly know how key event correspond the movement of the game.

Main class

The Main class create a JFrame and add GameFrame class in the Jframe in order to start game. then make a size of the game (800, 600) and make it unchangeable to control the range of the game. Also use setDefaultCloseOperation(JFrame.***EXIT_ON_CLOSE***) method in order to close the game.
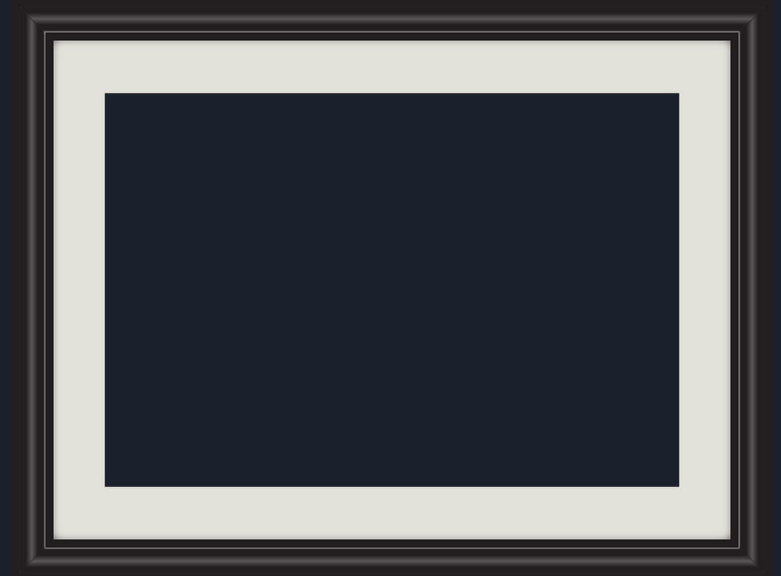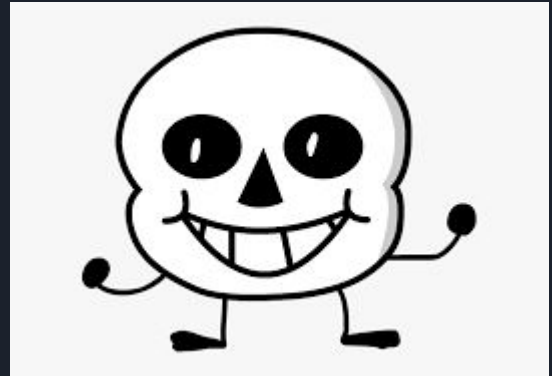
GameFrame class

GameFrame class is a class that implements the ActionListener class which have a paint and repaint method to change the game as the maintimer in the class change. and it initialize all the class it contain in the game and allow the panel of the object add into Jframe. Also it has a checkpoint to check if the player have die(hp lower than 0) or not. If the player die, the restart picture will show up and press r can restart the game. (press r during the game also restart the game). Also, there will be ten enemy initialize randomly in the game, as the time go on, the speed of the enemy become faster and faster, also once one of it die. it will form a new one in random place. and there will be a place to record how many second player stand and how many hp the player left.

Entity class

a class that is extended by other objects like enemy and player which have a x and y value in constructor indicate the place the object will be.

Player class

This is the class that respond key action. using "WASD" key to control player movement. also contain a collision to enemy so when player touch enemy, the hp will decrease. also it give the image to paint on the GameFrame and change as the player facing different direction. also it give the information that is the player die or not to GameFrame in order to go into game over phrase.

Enemy class

this class contain a movement that will going four direction and it will bounce 90 degree once it attach to the range of the frame.

keyAdapt class

A class that record the key event and send it to player in order to make movement on the player or the game.

sources

knowledge:

https://www.youtube.com/user/baseball4355

backgraoud:

https://www.itl.cat/wallview/ThiToR_wide-16-light-color-background-images-hd/

picture editing:

https://www.uupoop.com/