In the Name of God

Shiraz University

Fundamentals of Computer Programming

Project Definition

Due time: January 15, 2017, 23:55

Pac-Man Game

If you are not familiar with this game, use this link.

Rules:

- In this game, you have a player and some enemies that can kill the player.

- Player starts in a particular place and starts moving when user presses a key. From now the player moves toward the last direction chosen by player until user changes the direction or player reaches a wall. The player stops moving if reaches a wall.

- Game map has some blocks and all other places of the map are filled with food.

- Player can earn score by eating foods and the score must be displayed during the game.

- Game is over when there is no more food in map or the player is killed by an enemy.

- Enemies move randomly. (direction in every move is randomly chosen). Two enemies can be at the same place at a time, but enemies cannot move through the walls.

- The game must have a menu that lets player start a new game and see the high scores.

- You have to read map (place of each wall) from a file with a given name. (Have to ask for name each time)

Format of map file

The first line of file has two numbers separated by space and indicates the size of game window (console). (The default size of console is 80 * 24)

The second line of file is a number (n) that indicates the number of walls and the next n lines of file are the positions of the walls. (The position lines have two space separated numbers that the first number is x and the second is y)

The next line is a number that indicates the number of enemies.

The map file format is ".txt".

Features like:

        Saving and loading the game

        Game pause

        And other extra features…

are optional and have bonus grade.