

DOCUMENTATION FOR **PYTHON PROJECT**

TITLE : MULTIPLAYER PACMAN

DESCRIPTION :

Pac-Man is an arcade video game. It was released in 1980, and became very popular in the history of games.

We will first divide the maze into smaller blocks where each tile which is part of tunnel represents a place where an Actor can exist. An Actor could be either a Pacman, or a Ghost. If at a time ghost and pacman appears to be in a single tile their is where user looses a life, once a player looses three lives then game is over.

Out of many blocks there will some continous collection of blocks knowns as tunnel only where pacman and ghost is allowed to move. At start of the game there will be three pairs of ghosts, three ghosts will haunt one player but if other player collides with the ghost not following him then also pacman will die. Player objective is to collect as many pellets(dots) as possible also player need to be aware of ghost. There is also a super pellet which appears regularly on the maze .Whenever one pacman eats a Super pellet (The bigger dot that originally will make ghosts fear pacman for 5 seconds), all of the ghosts will now haunt the opponent pacman.

Game ends when one of the players losses all the given lives or all the pallets on maze are collected.

USER REQUIREMENTS :

- User have to press spacebar to start the game.
- User can press cross symbol on top right corner to close the game

For User1:

- press right arrow key to move right
- press left arrow key to move left
- press up arrow key to move up
- press down arrow key to move down

For User2:

- press 'd' key to move right
- press 'a' key to move left
- press 'w' key to move up
- press 's' key to move down

PACKAGES USED :

- Pygame
- sys

DESIGN :

we have used 3 classes :

- app_class
- player_class
- enemy_class

app_class is use to maintain background and changing state of game like from starting to playing , it also use to display ghosts and players. Basically app_class is taking care of most of parts of the game.

player_class is used for basic requiriments of player like moving the player in required directions also it checks that player doesn't go to restricted areas

enemy_class contains informations of the moments of ghosts (i.e train the ghosts) all three ghosts are trained differently to increase the toughness of the game. One ghost will follow the current position of player by choosing the shortest position. Other ghost will follow the five positions ahead current

position of player by choosing the shortest position and the last ghost will move randomly

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