

PAC-MAN



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CMPS 3350

Overview:

An individual player is assigned a character known as Pac-Man, who is a brave spirit, seeking to gather all the gold coins that lie in the forbidden labyrinth of the kingdom. In order to purchase food to end the famine, that terrorizes his village. The eponymous character is barricaded within an endless maze, where different colored malicious aliens are trying to engulf him alive, for their entertainment.

Can Pac-Man collect all the priceless treasures in time before the aliens capture him or can he escape with the items that he was searching for in time? Let the advantage begin.

Technical Requirements:

- Programming language: C++
- Graphical program: XQuartz, OpenGL, or X Windows

Product Features:

- 2 Dimensional Graphical Game
- Art
- Sound effects
- Prioritizing user experience, in order for them to continue to play the game

Overall Objectives:

- Utilizing the left, right, up and down arrow keys, in order for Pac-Man to escape the aliens within the maze
- Designing a labyrinth, enclosing Pac-Man, the aliens, as well as the treasures
- Creating Pac-Man, the aliens, and the gold coins
- Powerups (i.e if character obtains or consumes a certain element it will give it an advantage).
- Collision detection.
- Enabling Pac-Man to collect the gold coins, once he acquires one
- Block Pac-Man when he comes across a wall, not allowing him to move over wall(s) within the maze

Stretch Goals:

- Developing various levels of the labyrinth as the character completes previous phases of the game, increasing the level of difficulty. To make it more challenging for the player
- Letting the user customize the character, changing the game theme.

- Integrating Mrs. Pac-Man, to help Mr. Pac-Man on his endeavors
- If the player manages to complete the game, then send the gamer a special message. Inviting him/her to visit the developers as a price
- Design a leaderboard
- Making a menu screen, allowing the player to enter or exit out of the screen
- Add a time, in order to see how fast the player can complete the game
- Include a pop up screen, if the player is out of lifes. With the option to continue playing or exit the game
- Give an option for the player to choose between dark or light mode, in order to avoid them straining their eye from excessive hours of playing

Division of Labor:

- Dominic Fanucchi's assigned role(s): (9/22 Status: to be decided)
 - I.
 - II.
- Kenneth Wood's assigned role(s): (9/22 Status: to be decided)
 - I.
 - II.
- Juan Sierra Diaz's assigned role(s): (9/22 Status: to be decided)
 - I.
 - II.
- Andrew Nguyen's assigned role(s): (9/22 Status: to be decided)
 - I.
 - II.