

Ulric Aird & Trevon Friday

Course: Advance Programming

Project Title: Pacman

Scope

This project created a pacman game with the basic aspects like player controlled pacman movements, navigating the maze, ball collection, a ghost chasing pacman and etc. It will focus on the main game-play aspect excluding the “path-finding” algorithm it uses, multiple levels and sounds.

Reason For Project

This project will give us hands-on experience in game development, where we cover the basic concepts like game logic, data structures and algorithms. It’s a way for us to learn skills like problem solving and software & game design.

Software Used

Pacman will be created using VS Code with the JDK. With JDK and its packages, we are able to create the game with efficient code performance, which are equivalent to does of Netbeans and IntelliJ.

Algorithm of the Game

```
InitializeGame(); // Starting the game

// Game Loop

while (gameRunning) {

    handleInput(); // Input controls

    movePacMan(); // Moving the pacman

    checkBallCollision(); //checking if pacman touches the balls

    checkGhostCollision(); // check if the pacman touches the ghost

    moveGhosts(); // pathfinding for ghosts to move around.

    delay(frameRate); // rendering the frames.

}
```