Project Design Document

Project Concept

1

Player Control

You control a

robot

in this

top Down

game

where

Keyboard input

makes the player

Navigate a maze

2

Basic Gameplay

During the game,

keys

appear

from

Random hallways

and the goal of the game is to

collect all the keys to unlock the exit and progress to the next level

3

Sound & Effects

There will be sound effects

for collecting keys,, unlocking doors, and when the player loses a life

and particle effects

when a robot runs into a trap or collects an item

[*optional*] There will also be

glow effects on collectibles and dynamic shadows to enhance the visual experience

4

Gameplay Mechanics

As the game progresses,

The maze gets more complex, and guards start to spawn

making it

more challenging to find the keys without taking damage

[*optional*] There will also be

power-ups that temporarily disable guards or reveal the path to the next key and their effect on the game will be to give players strategic choices to enhance gameplay

5

User Interface

The

score/lives

will

increase/decrease

whenever

A door is unlocked/user gets hurt by trap or guard

At the start of the game, the title

Maze Guy

will appear

and the game will end when

The user runs out of lives

6 Other Features	- Game will be in pixel art style - Will include another difficulty option which is timed for a more challenging experience

Project Timeline

Milestone	Description	Due
#1	- Basic player movement and collision detection with walls. - Simple coin collection mechanics.	02/10
#2	- Implement keys and door unlocking system. - Add basic patrolling guards with line-of-sight detection.	02/17
#3	- Develop sound and particle effects for game interactions. - Create the first set of levels with increasing complexity.	02/24
#4	- Introduce power-ups and their effects on gameplay. - Implement dynamic shadows and glow effects for enhanced visuals.	03/02
#5	- Finalize the user interface with score, lives, and timer - Add the level editor mode for players to create custom mazes.	03/09
Backlog	- Leaderboard integration for competitive play. - Additional themed levels and enemy variations. - Multiplayer functionality for collaborative play.	03/16

Project Sketch