

COP290 Assignment 2 Report

2 Player Maze Game

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1 Story

The story follows the Mario brothers Mario and Luigi on their quest to retrieve the legendary Red Diamond on Avery island taught to be protected deep in the dungeons by ghost pirates allies of king Avery. The diamond sits right in the middle of the dungeon and many daredevils have tried and failed to get their hands on the famous Red Diamond. Now the Mario brothers have taken it upon themselves to get the Red Diamond in their grasp but they know it won't be easy. So they have sought the help of a witch to get special powers in order to obtain the diamond. Enjoy the "DIAMOND RUSH".

2 Game Description

There are two modes of play, single player with Mario and two player mode with one player controlling Mario and other player controlling Luigi. The players need to guide the characters dodging the ghosts which are blind and change their direction only when they encounter a wall. The players are required to collect all the coins in order to open the gate for the vault where the Red Diamond is stored. Without collecting the coins the diamond is sealed securely. As soon as all the coins are collected there is an increase in the ghost's velocity as they can sense that the diamond is in danger and enter a state of panic. In this stage the ghosts travel faster than the players and to dodge the ghosts in this mode the players are given a special power which can make them invisible for 3 second but the caveat is that it can be used only thrice. So the players have to use the power strategically. The players start with 3 lives initially. If they collect the diamond before they run out of lives they win the game otherwise the game is over.

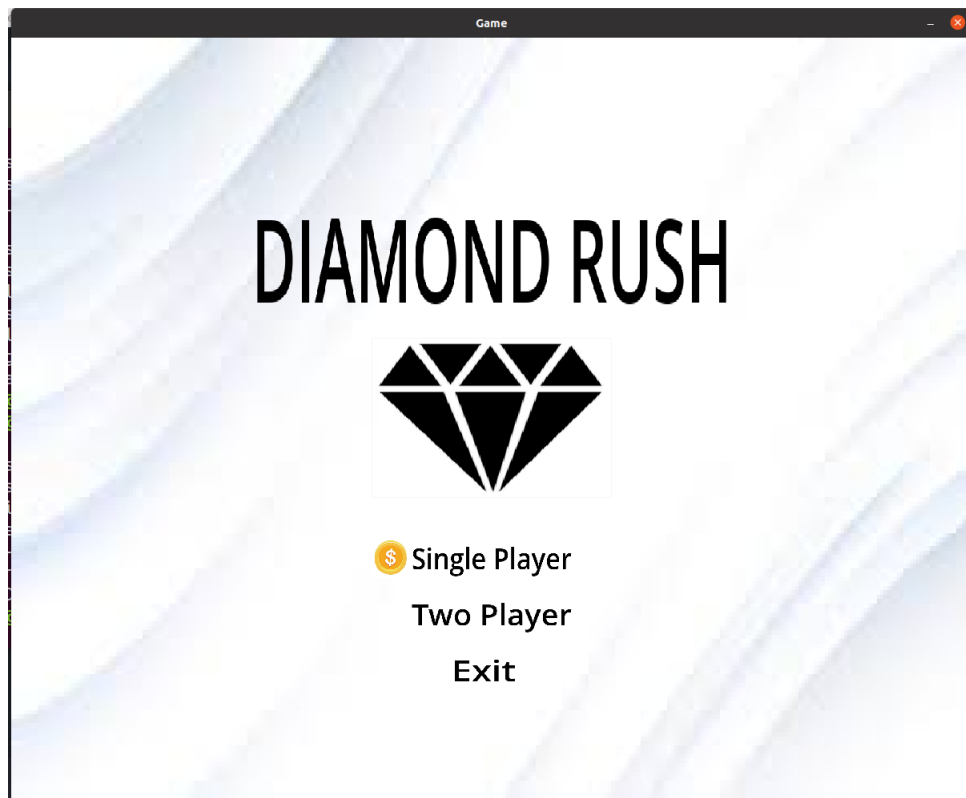


Figure 1: Main Menu

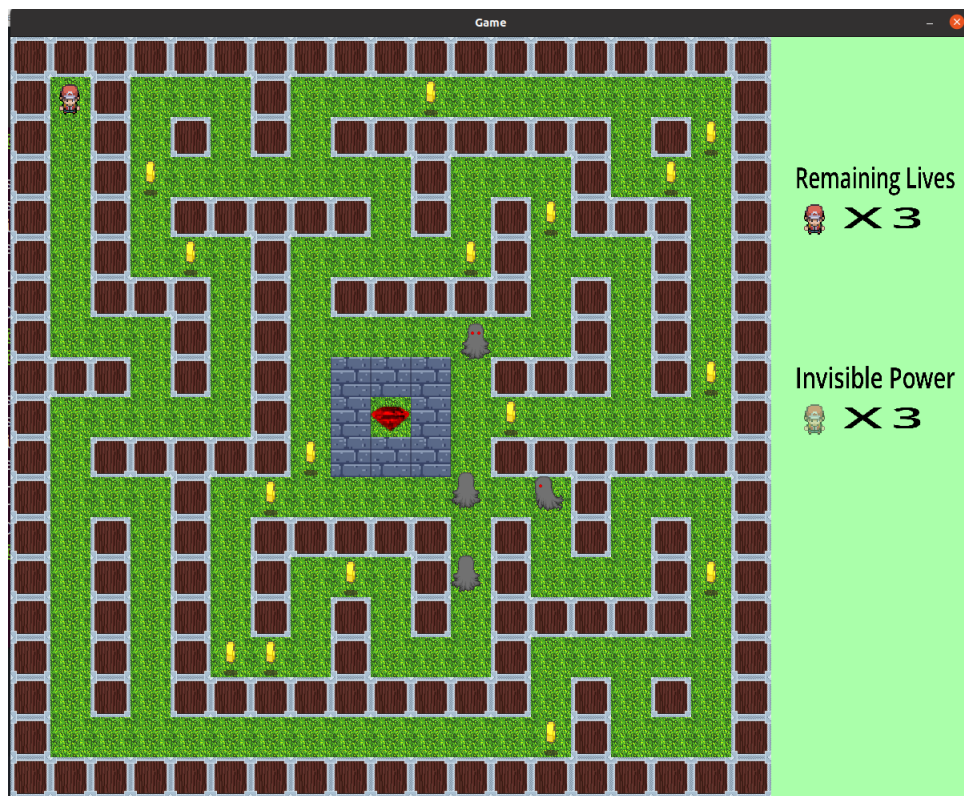


Figure 2: Single Player Mode

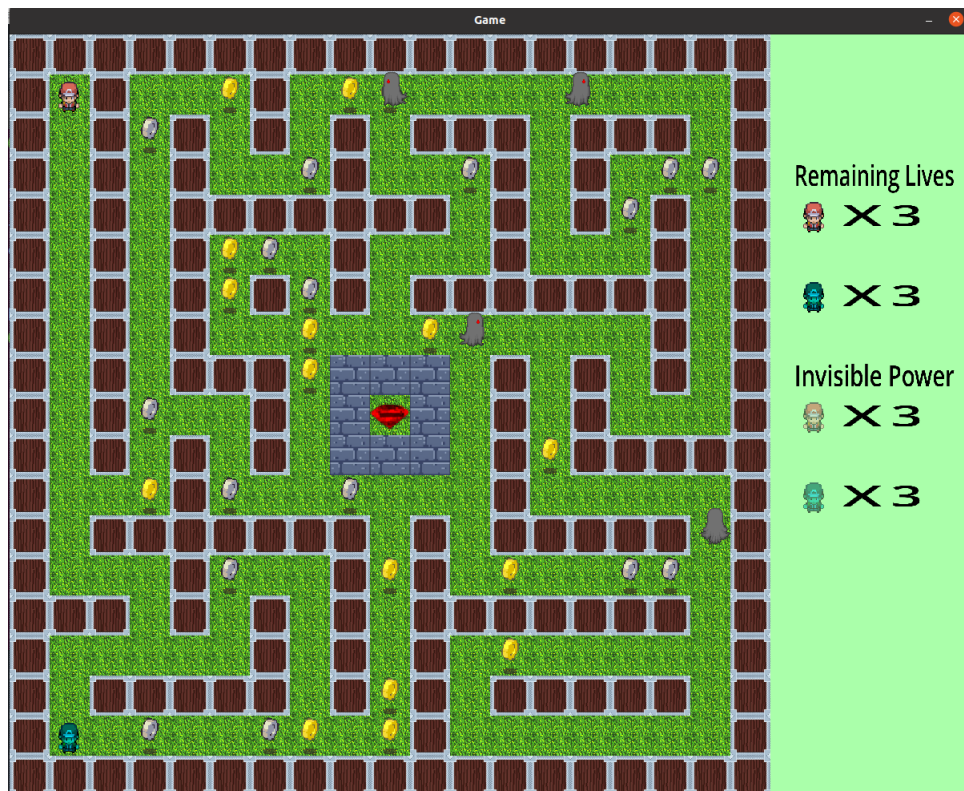


Figure 3: 2 Player Mode

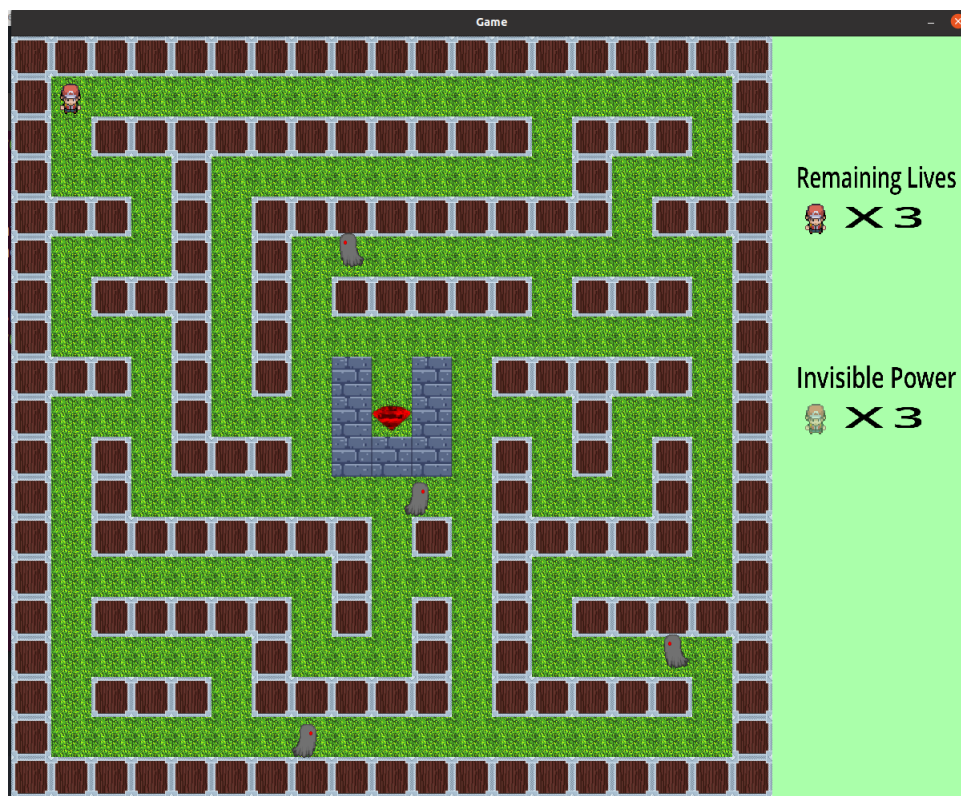


Figure 4: Gate open after collecting all the coins

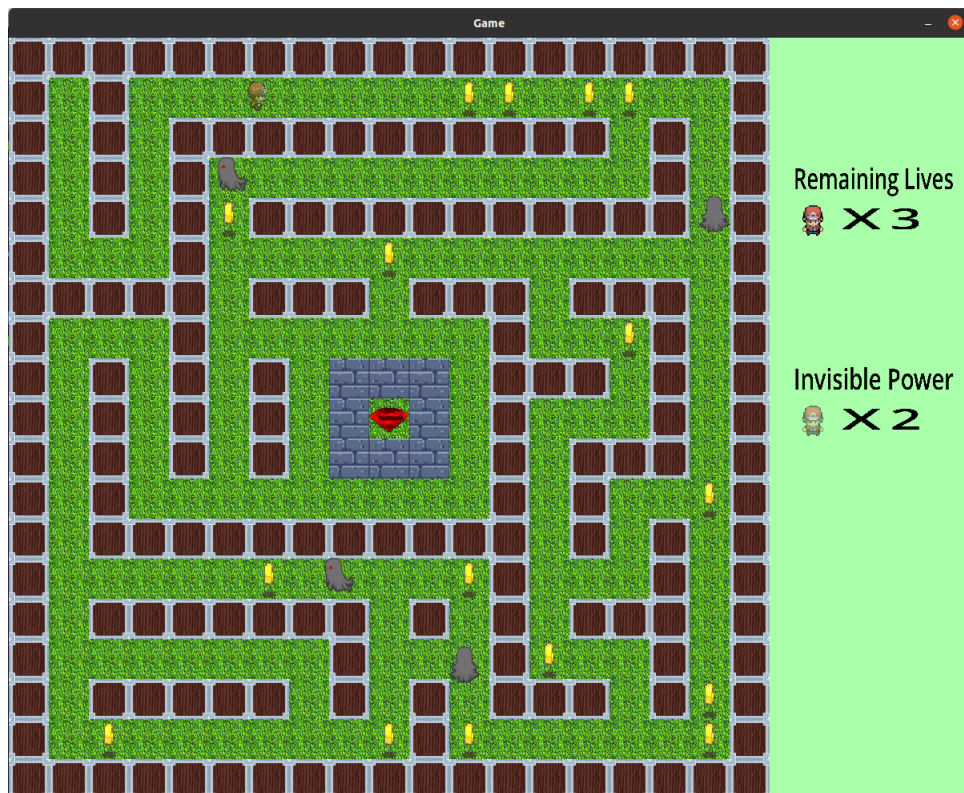


Figure 5: Player enter stealth mode to avoid ghost

3 Game Controls

3.1 Single Player

In single player mode only Mario is present on the screen and after collecting all the gold coins the gate of the diamond vault opens and Mario can collect the diamond. The player can be controlled using Arrows keys: UP for up, DOWN for down, LEFT for left, and RIGHT for right. The power can be used by pressing SPACE.

3.2 Double Player

In double player mode Mario as well as Luigi is present on the screen and after collecting all the gold coins and silver coins in this case the gate of the diamond vault opens and anyone of Mario or Luigi can collect the diamond. Mario can be controlled using Arrows keys: UP for up, DOWN for down, LEFT for left, and RIGHT for right. The power can be used by pressing SPACE. Luigi can be controlled using AWS keys: W for up, S for down, A for left, and D for right. The power can be used by pressing LSHIFT. Note that Mario can only collect gold coins and Luigi can only collect silver coins and both coins need to be collected in order to open the diamond vault and obtain it.