THE WRITHING LABYRINTH

1

INTRODUCTION

The aim is to implement an algorithm in creating a game with challenging mechanics, and a set of cards that will act as a buff to aid the player in traversing the dungeon. The game's mechanics will be inspired by the "wumpus" game, which includes a unique cell occupied by the Wumpus, a menacing creature. The player will be the only one using these viewpoints and power ups; There are no any AI algorithms used for the monster. Utilizing a random walk algorithm can be a viable viableapproach for implementing the generation of the map. Maze-based games offer practical and engaging environment for testing and refining algorithms related to pathfinding and navigation. Players engage in combat with a variety of monsters, dodge traps, work puzzles, and steal treasure. Only desktop or laptop computers can be used to play the game. There are currently seven power ups and nine stages in the game, with the Wumpus being the example. The game will not use of shops or gold. It is usually a kind of scenario where heroes explore a maze-like setting, or "dungeon"

METHOD

The game development section is focused on creating the game mechanics?. The script used to spawn the enemy inside the dungeon was used for the generation of the dungeon. The Spiral Model can be a useful strategy to manage the dynamic and iterative nature of game design and implementation in the high-stakes field of game development. The player will be able to explore the game and try to escape the cave without encountering the Wumpus. The collection of cards button will display the own cards of the player depending on their card type (common and rare) The game is designed to be played in a series of cycles. The first phase focuses on the actual development and testing of the software. The second phase is the planning and implementation of the next phase. The third and final phase is when the game is fully tested. The game was designed to have a minimum room width and height of one hundred. The minimum volume is set by the user by using a slider to change the volume. The maximum room width is set to one hundred and the maximum height is set at one hundred feet. Common cards offer simple buffs and provide minimal effect to aid the player in finding more fragments and helping the player escape the monster. Common cards offer additional speed upon the player?s activation. This section is focused on different generated dungeons using the Random Walk Algorithm and parameter set. The first three figures show the Shadowed Halls map with randomly generated Dungeon based on the set parameters that was set. It also specifies the number of random ranges of fragments that will spawn according to the extent the dungeon is based on. The Wumpus Game was developed by the developers of ACER Nitro. The game was designed to be played on a variety of devices. It was developed using the Open Source Game Development (OGD) toolkit. It is intended to be used on a range of devices, including PC, Mac, and iOS. The Wumpu Game is available for download on the ACERNitro website. It can be played by any user on any of the devices that the developers have approved. The game's main evaluation factor will be the main evaluation of the game's difficulty, fairness and general fun factor. A use case diagram serves to illustrate the various ways in which a user could engage with a system. The developers used the Piskel software application to create

these sprites. The game's graphical user interface, sound effects, and overall paralleled gameplay were all deliberately crafted to increase player involvement. The players can quit the game and come back to where they left, and the developers allow users to collect fragments in the game to have cards that will buff their players. The Writhing Labyrinth was developed using the Unity game engine. The game uses a built-in library for accepting random integers or floats of any range. The Spiral Model is a kind of software development process that integrates aspects of both the waterfall and iterative models Random Walk Algorithm script. It is used to streamline the iteration process across diverse versions of the system. It was designed to be a fun and interactive experience. The interactive version of the game is available for download now from the iTunes store.

RESULTS

The game does not currently support online and multiplayer mode. The game cannot be modified using a cheat console. The player has an entirely new environment to traverse. The players can access the cards they can use in the game and the number of cards they have obtained in the. game through the ?Card Collection? Button. They can adjust their BGM and SFX based on their gaming preference and be able to reset their data inputted in the paralleledgame.io panel. In addition, other applications such as Pixilart, Pixabay, Piskel and sprites from itch.io were used for the sprite creation. The game uses ISO 25010 as the standard criteria for assessing the game system?s quality. The player can navigate anywhere in the dungeon to obtain random common fragments and rare fragments to build a certain card. Threats are activated if the player stays inside the dungeon for a certain duration of time. The game offers a new way of playing that keeps the players thrilled and critical thinking skills at the same time. It includes cards which give a variety of buffs to help the player finish the dungeon. The game offers random generated dungeons every time the level unlocks. Completing certain levels unlocks the next level, which offers a more expanded dungeon area. Cycles 1 and 2 shows that all test cases were successfully completed. The game is available now for download from the PlayStation Store. The software is available for download now from the Playstation Store for $39.99. For more information on the game, visit the PlayStation store. For the full report, visit the PlayStation Store.

DISCUSSION

The Writhing Labyrinth was developed using the C# programming language in Visual Studio Code and the Unity Game Engine. The game was tested for performance, balancing, and functionality, proving its quality. The Writhing labyrinth was given a descriptive rating of Highly Acceptable and an overall weighted mean of 3.30. The following recommendations are given for potential future game improvements, based on the study's results and conclusions. The recommendations include: Make the game multiplayer to expand gaming experience with another player/s.