

**CSMC311 SOFTWARE ENGINEERING 2
PROJECT**

First Semester SY 2021-2022
Department of Computer Science

Cure Escape

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Submitted to
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Game Description

Game story

- The world is faced with a crisis due to the spread of the virus. After some time, almost 80% of the world is infected and is at risk to succumb to the virus. Due to desperation, The world government formed an organization named HOPE that specializes in researching the virus. Hope learned that the virus was spread by the evil organization named EVO and got intel that they have information regarding the cure. Also, HOPE learned the EVO base is in part of Asia where they reside in a building. To create a cure HOPE must get intel about the cure by infiltrating the EVO building. Due to a shortage of soldiers the HOPE organization cant attack the EVO tower head-on, instead they planned to send a veteran spy named Hannibal that specialized in stealing and escaping.

Game Character

- Hannibal is the protagonist of the game.

Game Design

- The Evo base is a building that consists of 3 floors. Each floor is a maze structure and each maze floor is unique, where no two mazes are the same design. All of the mazes have files that are needed to complete the game, the player needs to find all 10 files scattered around a floor maze in order to finish the floor. Making the difficulty of the game, all of the floor mazes have traps that are scattered all over the floor maze. If the player is caught by the trap, the game will immediately restart. There is a time that starts to count upon playing the game, where the player must beat a maze with the best time possibly he/she can finish. Each floor maze is unique in terms of its structure that depends on its difficulty, which is easy, normal, and hard. That each difficulty will increase the number of traps, thus increasing the difficulty for the player to beat the maze. The player can choose only three difficulty levels and once he/she beat one level, he/she can restart the level to beat his/her time or quit and choose another level with a different difficulty to try out his/her skill.

Gameplay

- The game will start with the game menu that shows the game poster and the buttons (Play and Quit), the plate button will proceed to the next scene and the quit button will immediately close the game. Upon clicking the play button, it will proceed to the next scene which shows the story of the world and how it came to be. Pressing the next button on the bottom of the scene will proceed to another scene that shows, the protagonist infiltrating the EVO base and selecting the next button at the bottom of the scene. Selecting the next will proceed in a scene, where there will be a scene that will let the player choose the difficulty which will be the level of the game. The options that the

player can select in this scene are easy, normal, and hard. Then the player must choose one of the difficulties and once the player chooses his/her desired difficulty level, it will proceed to the game level. This is where the gameplay starts, the player will be started at the beginning of the maze and the countdown will start in 3. After the countdown is finished the player can move, The player will move if the correct key is pressed. The move keys are W - move top, A - move left, D - move right, and S - Move down. Once the player can move, the player must proceed in collecting the files scattered around the maze while avoiding all the traps. If the player gets caught by the trap it will proceed to a new scene that will display that the player died and show two options, which are the restart and quit. The restart button will proceed in restarting the game level and the quit button will proceed in going back to the game menu. While the player is playing, there is a time that is counted in the top left screen of the game and the time will end once the player is at the end of the maze. On the top right corner, there is a pause button that will freeze the game and show two buttons which are the resume and quit. The resume will unpause the game and proceed to where the player at. The quit button will proceed to quit the current level and proceed to the game menu. The player can finish the game if all 10 files are collected. If the player does not collect the right amount of files, even though the player reaches the end of the maze it will to proceed to the game over. This is why it is important to collect all 10 files before going to the end of the maze in order to have the best time possible to finish the game level. If the player reaches the end and all of the requirements are set which is collected all the files and avoid being killed by the traps, it will proceed in a new scene which is the game over which will display the time of the player that he/she finishes the level and below of it are the options. The first option is the Restart button that will restart the game level and the quit button that will go to the game menu and restart the whole cycle.

Technical Background

- For the technicalities of the game, the development of the game is done in the unity platform. The game is intended for PC use, which is not online but played locally via the installed PC.
- n the unity platform, the game is in 1080 x 1920 screen resolution and the camera view. The design of the maze is from generated maze from an online source. All installed packages in unity for the game are intended for the character design, object design, and also the music background.
- Additional tools in the development are the draw.io for the modeling, messenger & zoom for online meetings, and also youtube & StackOverflow for the tutorials used in the front and backend of the development.

The methodology used for the Game Creation

For our game development, we choose the waterfall method because of its simplicity. This is perfect for our team because of our little experience of developing games. due to the straightforwardness of the waterfall method, we can focus each process of a time in the development.

Communication

- Due to unforeseen circumstances, we decided to repeat from scratch in the development of the game. This is why whenever we find time, we do online meetings for brainstorming about the game. In the session, we talked about how can we create a fun game without making it difficult for us because both of us has little to no experience in developing a game, which is very important for this online meeting for us to now our weakness in order for us to know on how to approach in the development of the game.

Planning

- In this phase, we decided in creating an effective way to optimize our time in the development. We proceed in creating all of the possible tasks in the development. Once all tasks are created, we decide for the delegation of tasks in the development cycle, such as who will be in charge of the specif task. The importance of this phase in our team is that we know our individual tasks in the development.

Modeling

- In this phase, we created drawings before we start the development of the game. In the drawings, we took time in creating the structure of the game, first we decide on the numbers of the levels in the game. Second, we decide on the structure of each level of the game, the structure is the maze design. The third is the designing of the traps and their function on how will affect the player. Fourth is the placement of the traps in the maze structure, we took time in this part because this is where we decided in creating the difficulties of the game. It was a long process because the difficulty must challenge the player that is possible to finish. Fifth is drawing of the non-gameplay scenes such as the game menu, story scene, and another thing that is relevant for the game. Lastly, while we are in the process drawing of the game, we watched different tutorials about game development simultaneously in order to know what is possible and not possible in the development.

Construction

- In this phase, we decide for our development platform to be unity because all of our watched tutorials are about unity. Upon deciding unity, we install the unity in our machine and proceed in developing our game with references of our drawn model from the modeling stage. While in our development each of our teams has its own task that is decided from the planning stage. The task of nicolas was in the non-gameplay part that is still relevant in the game. The task of cabalquinto is in the gameplay part, which is the game mechanics of the game. Each takes turns in the development of the game.
- In the game development, all-important packages such as the character and object design are installed, all game scenes are designed, and each function in the game has its own code script. The testing is also in this phase for debugging and improvement.

Deployment

- In the last phase, the game is developed and ready for presentation.

Game Manual

Game menu

This is the starting scene of the game, where the players can select to options presented in the game. The first option is the Play Button, this will proceed to the next scene of the game. The second option is the Quit, this will close the application.



Story scene

This scene will brief the player on how the world of Cure Escape came to be and how to save the world of the Cure Escape. The next scene will show the story of the player's protagonist which is Hannibal and brief the player of the task of the game. Both story scene has a next button on the bottom of the screen, upon pressing it will proceed to the next scene.

The world is faced with a crisis due to the spread of the virus. After some time, almost 80% of the world is infected and is at risk to succumb to the virus. Due to desperation, The world government formed an organization named HOPE that specializes in researching the virus. Hope learned that the virus was spread by the evil organization named EVO and got intel that they have information regarding the cure. Also, HOPE learned the EVO base is in part of Asia where they reside in a building. To create a cure HOPE must get intel about the cure in the top of the tower. Due to a shortage of soldiers the HOPE organization cant attack the EVO Base head-on, instead they planned to send a veteran spy named Hannibal that specialized in stealing and escaping.

Next

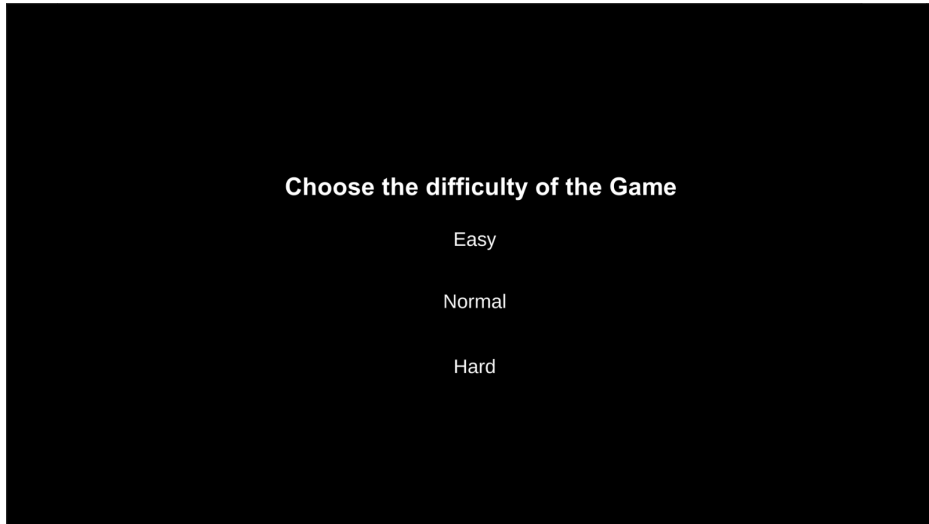
Hannibal successfully infiltrated the EVO base and to his surprise, the base is deserted. He then continued to the end of the long maze, which is the control room, and proceed to tinker with all of the computers. Upon tinkering the computers, the screens started to turn on. A message is seen on the screen reading "Congratulations for successfully finding my base, as a reward I'll give you information about the cure. The file about the cure is scattered all over my base, collect all 10 files and you have the information about the development of the cure. But can you collect all 10 files and escape my base alive?". The whole base started to shake and suddenly stop, Hannibal proceed to check the computers to know what happened. To his surprise, all traps are activated in the base.

Now Hannibal must escape with all 10 files, alive.

Next

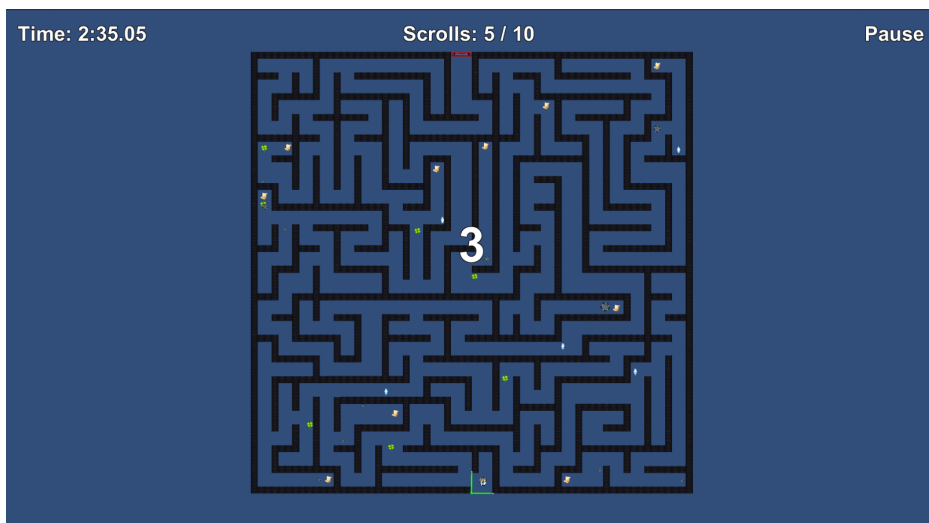
Option scene

This scene is the next of the story scene, where the player can select the difficulty and the level of the game. It is recommended for the player to play the hardest difficulty level because it is much more challenging and fun.



Easy level

This is the first difficulty level in the game, where the difficulty level is only at the easiest level.



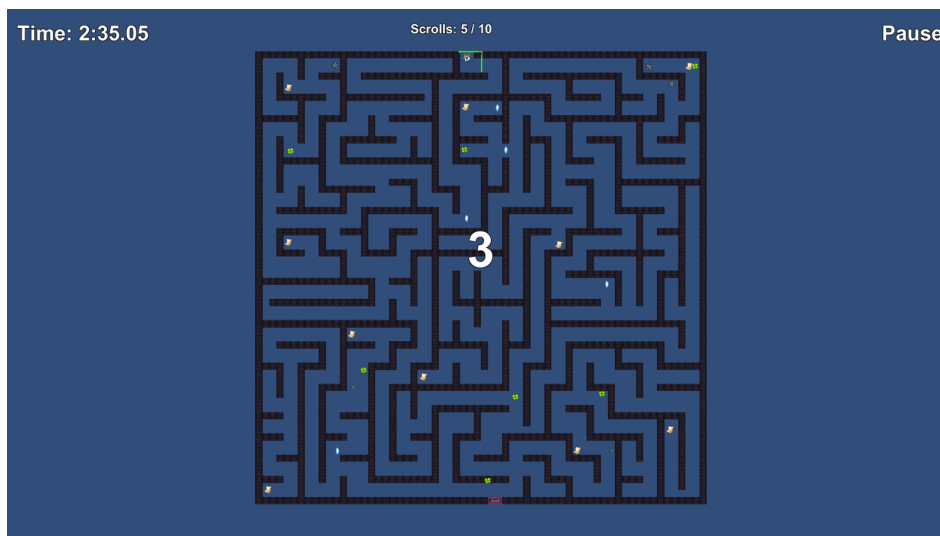
Normal level

This is the first difficulty level in the game, where the difficulty level is only at a normal level.



Hard level

This is the first difficulty level in the game, where the difficulty level is only at the hardest level.



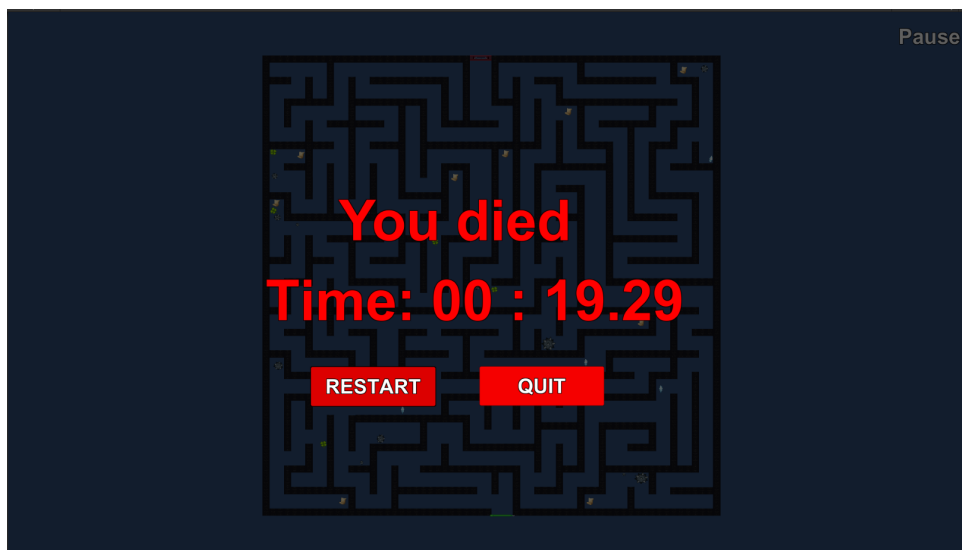
Pause menu

Upon playing the game, players can select the top right corner of the screen which has the name “pause”. Selecting this button, it will freeze the whole game and display two options. The first option is the Resume button, this will unfreeze the game and the player can return to playing the game. The second option is the Quit button, this will exit the game and proceed to the game menu scene.



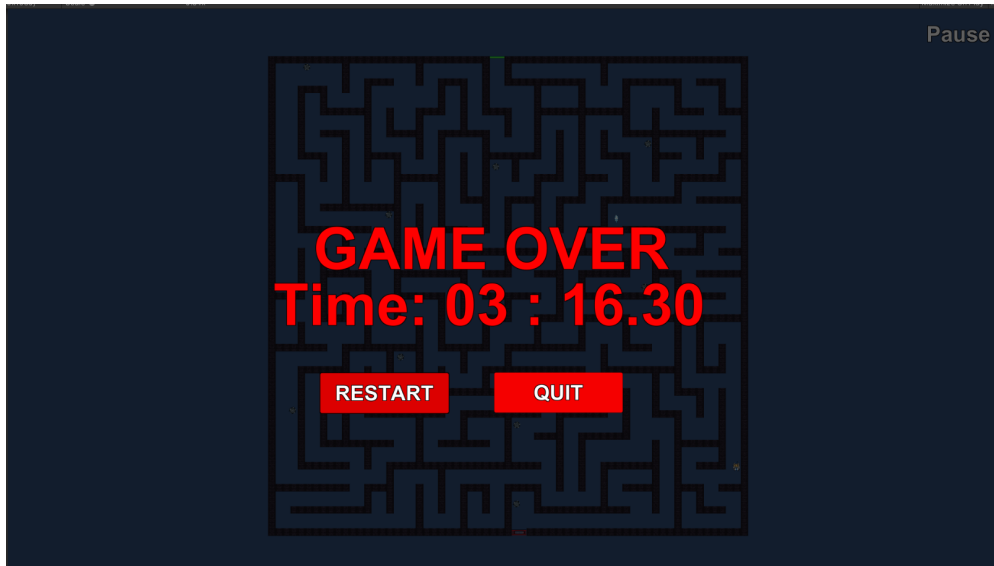
Death menu

If the player is caught by one trap at any game level, this scene will display. The players are given two options, where the first is to restart from the beginning of the game level or exit to the game menu.



Gameover

This scene will display if all 10 files are collected and the player manages to go to the end of the maze. This scene will give players the option to play again or quit the current game level and proceed to the game menu.



Poster

