

CS427: Game development and 3D Visualization

Mini Project 1: 2D Game and Application

Report

July 17, 2021

1 Group Information

Group 11: Robin Hood

- 18125023 - Le Viet Thanh
- 18125050 - Nguyen Phan Nhat Hoang
- 18125125 - Pham Bang Dang

2 Introduction

In this game, you are an excellent student with brilliant mind but no one is perfect and you like to do things YOUR way. The exams are close and you want to get a perfect score in this exam. So you decide to sneak into the principle's house and steal the exam papers.

However, the building containing the exam papers is a well-known maze with many connected challenging rooms, you need to "pry" chests open to get the key to the other rooms and the key to open the chest containing the exam papers.

3 Application

3.1 Ideas

We wanted to create a game with a simple UI but mind-challenging. We decided to combine the two most annoying features in brain-storm game which is solving quizzes and not to get lost in a maze. The game is short and simple so we only offer background sound to help players not to get bored when playing, we see the unnecessary in saves because the answers to quizzes are fixed. However, if player is tired, they can pause the game at any time or quit the game.

3.2 Techniques

1. Map design.
2. Rooms shuffling (change position of rooms).
3. Camera smooth motion.
4. Play sfx sounds on impacts.
5. UI design.

4 Resource references

4.1 Resources:

- <https://www.spritters-resource.com/nes/legendofzelda/sheet/8376/>
- <https://www.spritters-resource.com/snes/legendofzeldaalinktothepast/sheet/28731/>
- https://www.spritters-resource.com/pc_computer/cupheaddontdealwiththedevil/sheet/97184/

4.2 Codes:

Floating text:

- <https://www.youtube.com/watch?v=lKEKTWK9efE>

Question canvas:

- <https://www.youtube.com/watch?v=4n6RT805rCc>
- <https://www.youtube.com/watch?v=guelZvubWFY>
- <https://www.youtube.com/watch?v=vTMi6hb3QF0>

Sound & sfx:

- <https://www.youtube.com/watch?v=8pFlnyfRfRc>
- <https://studiomdhr.bandcamp.com/album/cuphead-original-soundtrack>

Smooth camera follow:

- https://www.youtube.com/watch?v=MFQhpwc6cKE&ab_channel=Brackeys