1.Introduction

1.1 Purpose of writing

The function of this project is to implement a plot-driven escape game, and we hope that the implementation of this project will enhance our programming power and software development level. Puzzle games usually require the player to analyze a scene, organize information, find clues and solve problems. This helps develop logical thinking and problem solving skills. It enhances our power of observation, creativity and imagination.

1.2 Project Background

Software Name: Dice Man Puzzle Adventure
Project Task Proposer: Dr. Lin Qifeng, Master of Software Engineering, Fuzhou University
Project Developer: No Yan Group

1.3 Reference

Software Requirements Specification (SRS) National Standard Specification File

2. Overall description

2.1 Goals

This game is focus on the creativity and the synthesis, which create a new way to have fun in the “Room Break”. The goals of this game aimed to occupied the market about the new domain in the “Room Break”.

2.1.1 Development intention

We use the Unity to accomplished it. We consider a lot of type of game on the Internet. And then got the new ideal from them,thereby create our own way about how we play the game. We have a variety of way to play this game, indicate to make a lot of fun to our player. Also we create the scene by ourselves by Unity, aimed to have more originality.

2.1.2 Application goals and scope

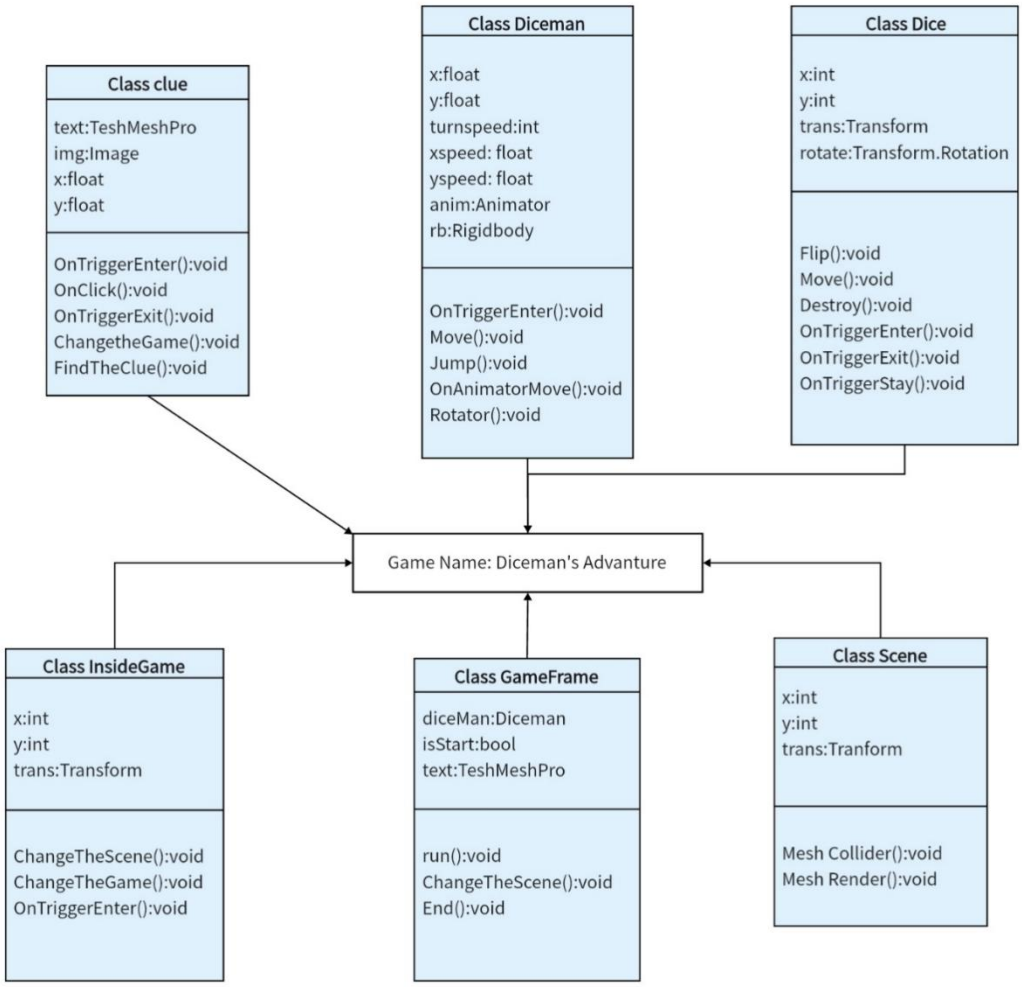
The game is face to the player who are elder than the 6 years old. This game tries to make the player get more experience feeling. Then we have the suitable level to the player that they can have the enough fun during the game. It might have a positive effect in the player daily life. Can help them to release pressure and develop intelligence.

2.1.3 Product prospects

At present, the design of the scene in this game is relatively simple, and the completeness of the gameplay rules still needs to be improved. In the next development process, we will optimize the scene configuration and improve the game rules.

3. Specific requirements

3.1 Class diagram



3.2 Features

3.2.1 Availability

(1) The operation is simple, the tutorial is clear, easy to get started.
(2) Using pixel painting style, the picture is exquisite and lovely, and the design is interesting.

(3) Novel and unique gameplay, high play ability.
(4) The difficulty of the game is gradual to attract players' interest, In the more difficult levels will be set up prompts to let the player play smoothly.

3.2.2 Security

(1) The game will not require the player's real name or phone number and other information to ensure the security of the player's information.
(2) The game does not require an Internet connection, avoiding many risks.

4. Interface prototype

We haven't implemented this module in Assignment 3, and we'll cover it in more details in Assignment 4.

5. Function description and acceptance verification standards

5.1 Detailed Function Description

The decryption game is a first-person perspective game with a cartoon style. Players will play the protagonist, needing to complete decryption tasks in each room to obtain a key to enter the next room. By solving a series of puzzles and challenges, the player's ultimate goal is to escape the casino.

- **Start Interface:** After the game starts, players will see a concise start interface, including options such as "Start Game", "Settings", and "Exit".
- **Game Interface:** After entering the room, players can operate with the mouse and keyboard, view various items and clues in the room, and interact with them to solve puzzles.
- **Decryption Tasks:** Each room has one or more decryption tasks, and players need to use the clues and tools in the room to complete them.
- **Keys and Doors:** After completing the decryption task, players will get a key, which can be used to open the door to the next room.
- **End Interface:** When the player escapes from the last room, the game ends, displaying the message "Congratulations on your successful escape!".

5.2 Input and Output Format

- **Input Format:** The game supports keyboard and mouse input. Players can use the W, A, S, D keys to move and click on items with the mouse to interact.
- **Output Format:** The game's output is a graphical interface, displaying the player's current environment, items, clues, etc.

5.3 Interface Acceptance Standards

- **User Interface:** The game interface should be clear and concise, easy for

players to understand and operate.

- **Interactive Response:** When clicking or operating items, the game should provide immediate feedback, such as item descriptions, decryption hints, etc.
- **Animation Effects:** When decryption is successful or fails, there should be corresponding animations and sound effects.

5.4 Functional Acceptance Standards

- **Smoothness:** The game should run smoothly, with no obvious lag or delay.
- **Decryption Logic:** The decryption task in each room should be challenging, but also ensure clear logic, so players can find solutions through observation and thinking.
- **Game Progress Save:** Players can save the game progress at any time and continue when starting the game next time.