C337 CA2 Game Design Document(GDD)

Design Theme: Prison Escape while solving Math problems.

a) Overview of the game:

It is like a prison escape but this time, in addition to trying to outrun the police or pretending to run away from them, we would need to solve a math puzzle before entering the portal. Difficulty can go as high as Sec 4 Math questions and we would need to choose the correct answer before entering the door. Fail to choose the correct answer would end up in a pool of lava. I guess you can say that it can be a bit like baldy basics kind of game.

b) Unique Selling Points:

It's a simple game of math and it helps to train your mathematics skills. There wont be police trying to chase you down but it is a good experience to know what is like to escape from prison or from someone who kidnap you.

Math problems usually would give you the pressure feeling which you find it hard to solve the problem. Sometimes there can have the feeling of joy and happiness because you realise that you aren't stupid or dumb that you can't solve math problems. Although sometimes you can also feel pride or you will start to show off because you can come out with the answer to the question in a few seconds.

c) Game loop.

It includes these various aspects of the game:

1. Graphics
2. Player input and information
3. Game updates
4. User interaction

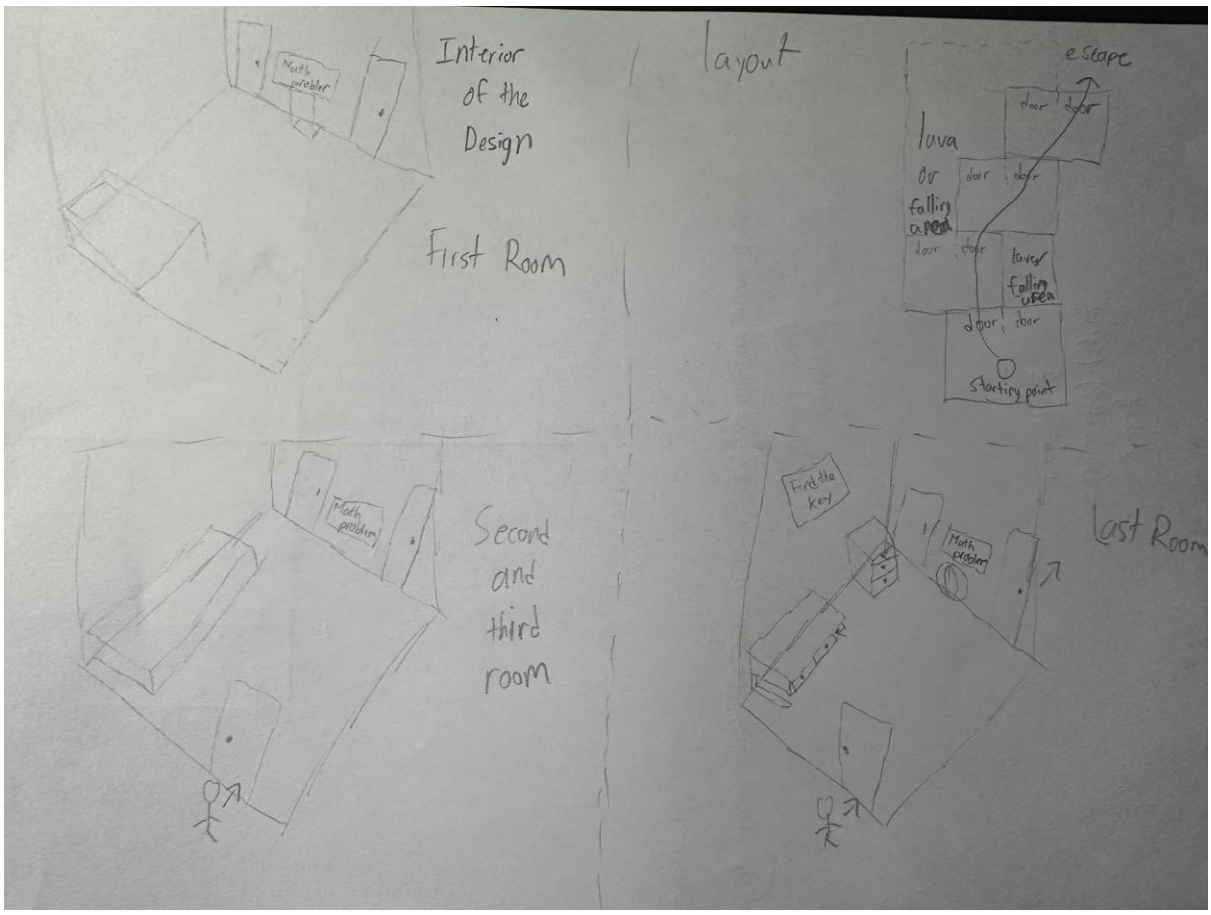
d) Gameplay scope:

This game targets players who like to play math problem games or escape rooms and the prison. The gameplay scope itself must have the following:

1. Good Content
2. Development Resources
3. Design Goals
4. Setting of the game

e) Art Style:

It should visually appeal to players as a ‘Solve math to escape’ kind of game which they should understand that they are being pressured to solve quick math problems. This would enhance the players knowledge and experience on how prisoners in movie shows escape from prison without the math solving.



f) Player Profiles schedule:

It is for players who wants to experience escaping from prison, solve math problems, or for people who wants an adventure in the prison.

g) Milestone Scheme:

Timeline for the project:

- Lesson 7-8: Designing the interior, exterior and the number of rooms
- Lesson 8-11: Modelling it out into unity and try to fix the little details of the work
- Lesson 11-12: Test out the work and see if there is anything to fix.
- Lesson 12: Submit

h) Project Vitals:

There are different things to consider which are the project scopes and objectives:

- Scope:
  - Develop a VR escape room game centered around solving math problems to escape from a prison. While solving the math problems, they are also required to press the buttons to unlock the doors ahead of them. There may also have certain items that you would need to grab.
- Objectives:
  - Provide an immersive VR experience.
  - Integrate educational content (math problems) seamlessly with gameplay.
  - Ensure a balance between game difficulty and educational value.

There are also Target Audiences to make sure that they are entertained and suitable for audience to play and there should not have an M18 or R21 stuff. It should also be a game where it is family friendly:

- Demographics: Students (age 9-any age), educators, VR gaming enthusiasts.
- Psychographics: Individuals interested in educational games, puzzle games, and VR experiences

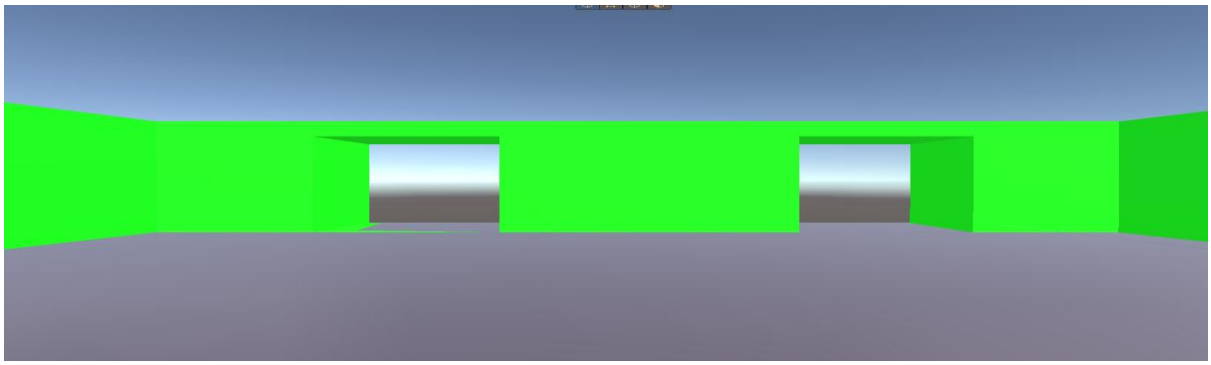
There are also key features to take note of like:

- Immersive VR Environment: Realistic prison setting with interactive elements.
- Math Problem Integration: Puzzles and challenges that require solving math problems to progress.
- Storyline: Engaging narrative that motivates players to solve problems and escape.
- User Interface: Intuitive controls and interfaces designed for VR.
- Multiplayer Options: Potential for cooperative gameplay where players can solve problems together.

The layout of the room Before and After:

Before:

Front:



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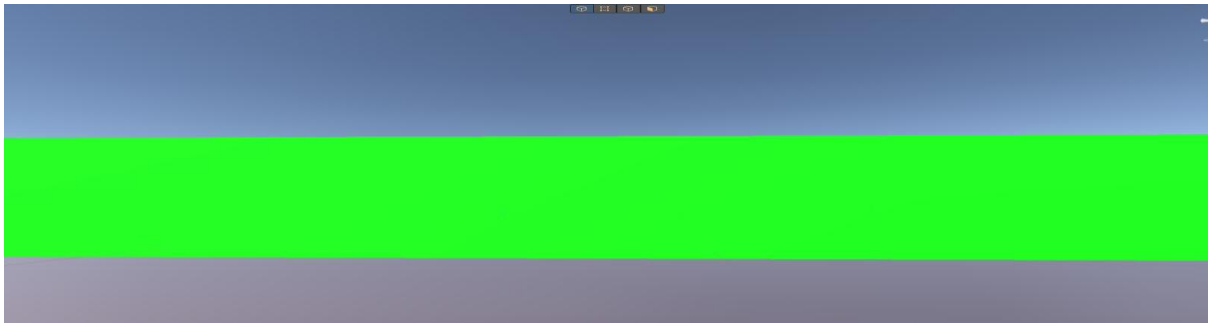

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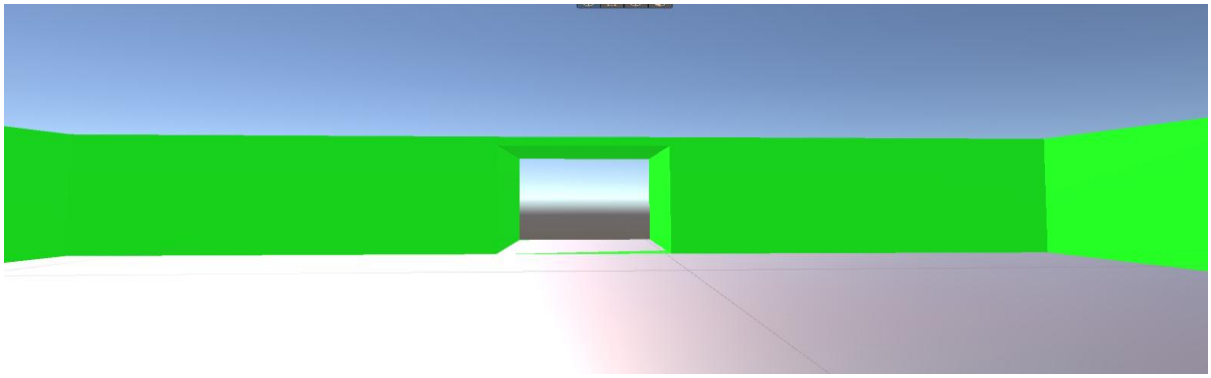

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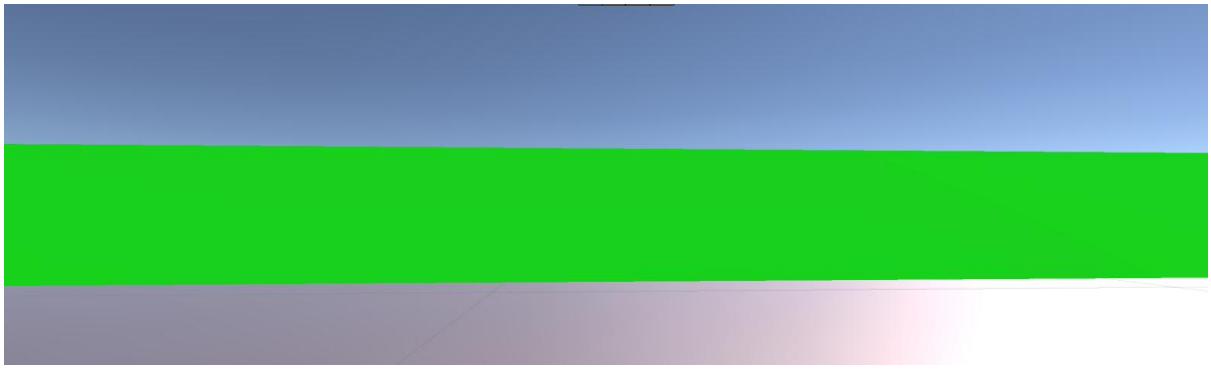
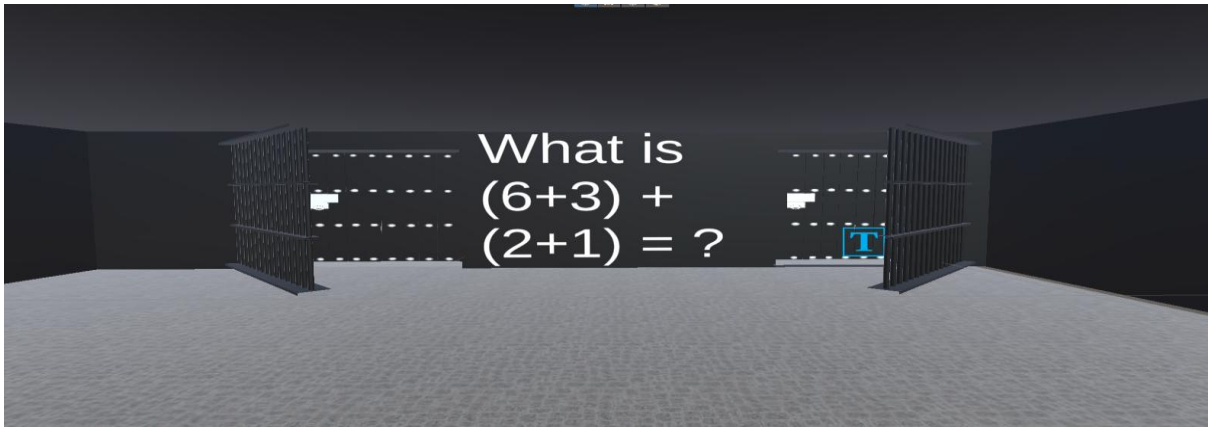


After:

Front:



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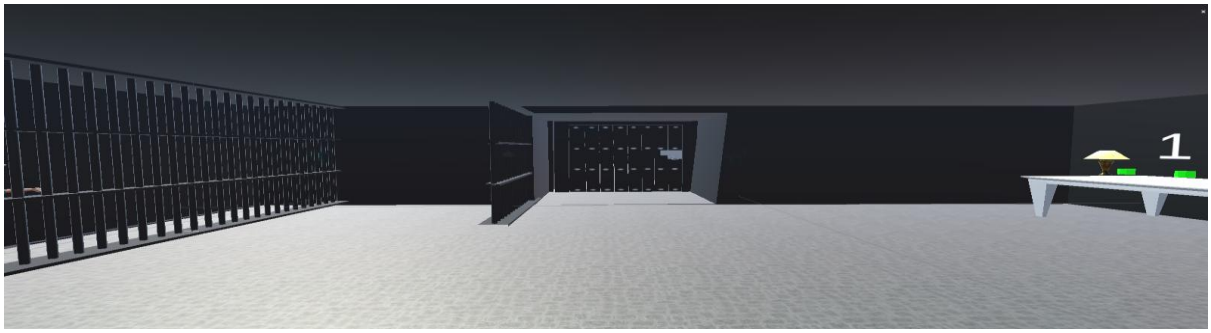

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