289106 Introduction to Game Technologies and Mechanics

Assignment 1: MystLike Design Journal

Game Introduction and Objective

My game, *The Mansion's Mystery*, was meant to be a longer explorative puzzle experience. The objective of this game is to escape the island by solving a series of puzzles which leads the player up the island. Only through combining the solutions of each puzzle, will the escape key be accessed.

Story Ideas

In gaming, and generally all types of visual media, I much prefer environmental storytelling to straight up words telling the player what to do or what to think. I considered how I would incorporate a story for the more attentive players while still developing an enjoyable experience for the players at surface level. What ended up happening in the end however, was letting the environment, and story, develop as I put the island together. The mansion could not have been a mansion, it could have been a castle or it could have been a "myst"ical tower, all I knew was that I wanted the conclusion of the game to take place in a large building which overlooks the village below.

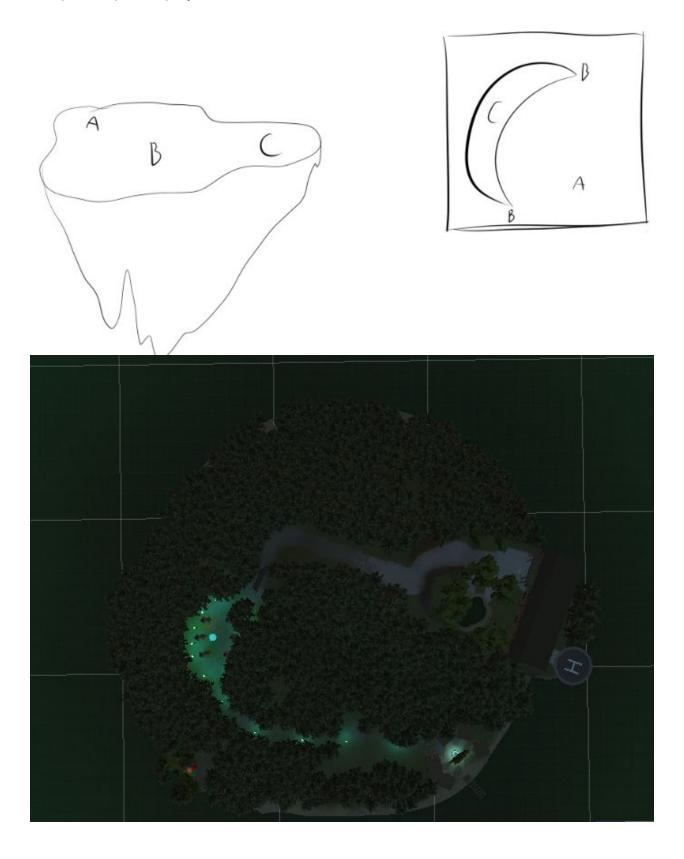
Final Story and Objective

Management has sent you to investigate why an island has gone silent in recent months. When you arrive on the island, they have stated that they will only come back when you shoot the flare given to you from the helipad on the top of the island, which is behind the mansion. Make your way through the abandoned village, through the ruins, and through the mansion to make your escape. Good luck.

Design and Development

I am very lucky to have had prior experience in previous versions of unity, so I already had an extensive knowledge base on how to use the basic tools. At first, before I had settled on the island idea and before I had played Myst itself, I had some differing thoughts. I was considering using a floating island in space, or a canyon in a rocky desert. When I asked about using a floating island, it was discouraged and I did not like how the canyon idea ended up so I went back to the drawing board. I then thought about a stair model, in which each puzzle was higher than the last one, which is the

idea I wound up going with. Below are the three designs I had in mind for this first-person puzzle project.



Design 1 - Floating space island

- A. Introduction to game mechanics and first puzzle
- B. Expanding on first puzzle with a more difficult version
- C. Entirely different puzzle based on previously seen concepts within the map, and conclusion to the game

Design 2 - Indiana Jones-like Crescent Moon Canyon

- A. Introduction to game and story in village
- B. First puzzle to get inside of the canyon (same on each end)
- C. Second puzzle to get inside of temple and third puzzle to obtain artifact

Design 3 - Mysteriously Abandoned island

- A. Village with wooden huts and a keypad puzzle
- B. Ruins with a button puzzle related to a mythical creature, the Phoenix
- C. Mansion puzzle(s) that lead to escape helipad

As seen above, the third design is the developed one. I chose it over the other two because not only was it an island like the original Myst's game took place on, but I found it most logical to go with. It was the most logical because as the puzzles themselves went up in difficulty, so did the geography the player was exploring. Plus, it was a lot more fun to spruce up the environment than the other two designs would have been.

Visual and Audio Development

Visuals

Like previously stated, I enjoy environmental storytelling and level design in general. When I was told that the game was going to look bad, I took that as a challenge. To overcome the challenge, I decided to consider placement of the puzzles and how the hint(s) would be incorporated into the visuals around the player. While I designed the puzzle and the hints, I built up the village first and then I put in the puzzle. I did the same for the ruins and the mansion. After I built up the structural and main gameplay parts of the island, I equipped myself with the tree and grass brushes and filled in as much as I could within reason and optimization.

Keeping the time frame in mind, I then filled the wooden houses with furniture designed by Synty Studios using the "Simple House Interiors" pack, "Simple Office Interiors" pack, and "Simple Shop Interiors" pack. These did not give me any trouble as I have used them before in other projects, and the best part of these packs is that there are not any

scripts to potentially mess up my code. I understand that the use of packs were discouraged, I used these because I knew that I did not have enough time to model and UV map the objects I wanted to include in the game. The mix of low-polygon textures and models and detailed outdoor textures created this odd yet good combination which really added to the map's atmosphere while not interfering with gameplay.

Audio

On my first playtest, one the key critiques that they had was that there was no audio nor user feedback. In order to fix this, I downloaded the AudioAssets unity package provided and used the button sound effects to provide some kind of audio based user feedback. I also used a different sound effect for when a player completes a puzzle, for some added flare.

To fix the lack of music, I took a look at the map's visuals and fog before deciding on what kind of ambience I wanted. I searched for royalty free night forest ambience and for relaxing ambient music on YouTube. Luckily, I found a good combination of sfx and ambient music without too much trouble and designed the music so they would fade into each other while having the sfx be a base sound underneath the music.

Puzzle Development

Designing a game like this is quite... puzzling!

In all seriousness, I knew what puzzles I wanted to have the player go through from the beginning of development. In previous games that I have played, I enjoyed the safe keypad puzzle cliche which is one of the puzzles I wanted to incorporate. Playing Myst inspired me as well because I enjoyed the pillar puzzle in which the player had to press the correct series of buttons to solve it, and I wanted to emulate that in my game.

The original plan for the mansion was to have the building include two puzzles, which gave the game 4 puzzles to work with. One of them was going to be in a library in which the player had to press certain books in a small amount of time, and the other was going to be another keypad puzzle. Solving both would make a bookcase in the first floor slide into the ground and unlock the door behind it, giving the player access to the exit key and flare they would have to use to win the game. What ended up happening however was that these two puzzles had to be scrapped due to time constraints, and in that place I used the classic book button cliche of a puzzle to unlock the final room where the player would pick up a flare and the exit key.

A list of the puzzles within the game:

- 1. Safe Keypad puzzle
- 2. Phoenix Pillar puzzle
- 3. Book Button puzzle

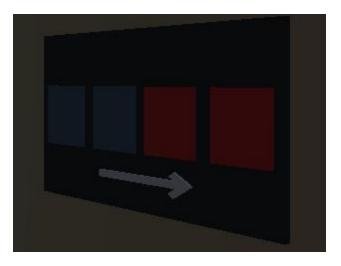
Puzzle the first: the Safe Keypad

I knew I wanted to start out with a simple concept which ended up being the safe keypad. What was not simple however, was the hint I was trying to give the player to make them able to solve it. The answer to the keypad puzzle is "0313". That is the date I had to come back to the United States from New Zealand, or at least I think it was.

My first hint attempt was to give the player a calendar in one of the huts with a leprechaun hat to symbolize March because that is when St. Patrick's day is which would signal the first part of the code which is "03". The second part of the calendar hint was a red X on the 13th square going from left to right. This hint ended up being far too vague and it did not work the way I wanted it to because the first playtester wrote that people may not link St. Patrick's day to March since it is not a big holiday like Christmas.

My next attempt at a hint was to put two different colored squares on the third and thirteenth square of the calendar. I also put a diagram of how the code was supposed to be input into the keypad in a different wooden hut. Unfortunately, that did not work either as playtesters still could not figure out how to solve the puzzle.





To solve this, I added a zero onto the first blue square on the hint plaque and added dice like symbols to the keypad.

Puzzle the Second: Phoenix Life Cycle

By far, to the players who made it this far, this puzzle was the most vague. At first, I had a piece of text that was supposed to hint at the series of buttons that the player was supposed to press. Unfortunately, that was far too vague and I had written in some mistakes which the first playtester was subject to. To fix this, I switched the text to symbols aligned in a circle with the text "Life Cycle of a Phoenix" above the symbols. From there, I needed to continue to make it more blatant. I added a note that can be zoomed in on that had the second half of the code on the bottom, and on that note I injected some story to the game as it is bloody and has the last words of the previous person who tried to investigate the island. This puzzle was heavily based on the column puzzle in Myst.







Puzzle the third: Bookcase

Finally, the last puzzle the player has to face is the bookcase puzzle door mentioned previously. For the observant players, the code is on the bar next to the bookcase as well as the corkboard at the other end of the room. The purpose of this puzzle is to both give the code the third invisible key that the other puzzles provided so the player can actually win the game, and it allows the player to have access to the flare and the key to the last door of the mansion.







Win Condition

In order to finish the game, I have made sure that the player has the flare, the final key, and has completed all three puzzles. Otherwise, the text "you feel like you are forgetting something" will appear on the bottom of the screen which will let the player know that they are not finished yet. Overall, I enjoyed the process of making this game, and I look forward to making more games on my own time outside of school.

References and Resources

Furniture assets: Synty Studios Simple packs.

Assistance with scripting: Unity Forums/Answers, and Stackoverflow

Audio: Youtube and Kevin Macleod (Incompetech).

I was inspired by the game $\underline{\text{Myst}}$ and other video game cliches.