**Progress Report**

**- Increment 2 -**

**Group #2, The Labyrinth**

# Team Members

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1. **Project Title and Description**

In our game, the Labyrinth, you wake up in a peculiar home with no knowledge of how you got there or why. Unlock new areas of the house using clues, hints, and solving puzzles. The story ends in the main character realizing they have died, and this is their mind’s way of coping and coming to terms with it. Each of the rooms in the house has different puzzles to solve, some of which unlock new areas of the house. Other puzzles give hints as to how to solve another puzzle later in the game.

1. **Accomplishments and overall project status during this increment**

We added functionality for an additional two scenes, the Kitchen and the Bedroom. The rooms have their own puzzles, hints for puzzles that will occur in other scenes, and new art assets. This increment serves as a greater example of what the complete game will be like, allowing the player to navigate throughout the entire house and discover details on their own. Harrison and Melanie continued drawing the final sprites while the rest of the team members drew mockups while waiting for them to finish.

In the kitchen, the fridge magnet puzzle was implemented, an anagram that gives the player a clue to opening the final area of the game. We successfully were able to get the text box to show each letter the user clicked as they were clicked. Once the anagram is solved, it closes out and the fridge shows the magnets in the right order (“FIREMAN”). This hint is intended to be used later on in the game to unlock the final area of the house while in the loft. We also made the tall cabinets on the wall interactable. When you click on them, they open up and show food, much of it rotten. We made the cabinet under the sink also interactable, showing cleaning products such as bleach. These two interactables are meant to enhance the plot, continuing to allude to the fact the player is actually dead.

In the bedroom, we created two puzzles and an interactable object. The user is able to interact with the grieving card on the dresser, which has a pictogram for the player to solve. Once they figure out the answer (“understand”), they can use it in the keypad puzzle which unlocks the bathroom area. The other puzzle in the room is the television puzzle. The TV has two knobs, volume and channel, that the user can interact with, and the puzzle will show a still of a video from the player’s seventh birthday. This plays into our plot, since the house is the player’s mind’s way of accepting their death. They are trying to do so and are reliving some happy memories along the way.

1. **Challenges, changes in the plan and scope of the project and things that went wrong during this increment**

We became confused about the due date of the second increment, accidently switching around dates. This resulted in us having to work on a much tighter schedule than initially planned. We also had some miscommunication issues between members, causing us to cancel meetings and reschedule a few times during this increment. Along with this, Melanie’s Unity application continuously froze while attempting to test the game, causing setbacks while working and testing.

We originally wanted to implement an inventory system, so the user could carry items throughout the scenes but decided against it. The puzzles we had in mind included interacting with several items, but we decided it would be too difficult and time consuming.

We were going to implement a save state system this increment so that players could solve puzzles and have their progress remain when they reload the room, but we ran into difficulties implementing the system. In the meantime we devised an alternate solution that allows the player to keep their progress on a single playthrough, though it is not perfect (puzzle UI that does not disappear after completion does not retain the entered answer). We will improve upon this system in the next increment.

1. **Team Member Contribution for this increment**

Melanie Bynum

* + For the progress report, I did parts A and B in full. For part C, I wrote the two paragraphs further describing what we achieved in the kitchen and the bedroom. I also mentioned how Harrison and I drew sprites again. For part D, I explained the changes related to the inventory we wanted for the game and why. For part F, I did all of the first two paragraphs and explained the next iteration would focus on the loft, bathroom, and backyard areas. I discussed the possible bathroom puzzle and the loft puzzle. I also talked about how we intend on adding more plot related pieces to the game, such as voice lines and interactable objects purely for the plot.
  + For the RD document, I updated the overview in section 1 to better reflect the state of our game. I also added several functional requirements in part 3, 13 through 22, and updated priority on a few others. I added non-functional requirements in part 3, including 4. I helped AJ with the use case diagram by making a draft of the kitchen portion of the diagram. I also wrote the textural descriptions for the use case diagrams.
  + For the IT document, I updated section 3, adding in the second paragraph describing how we tested the fridge magnet puzzle. I also updated section 4 with Harrison, giving an account of how he tested our save state requirement.
  + For the source code, I worked with Harrison and later Julio to implement the fridge magnet puzzle. I wrote the FridgeMagnet and FridgePuzzle scripts based on the Padlock scripts with the help of Harrison and Julio. I built the puzzle in the game, creating all the necessary box colliders and connected the sprites and modules together to get the puzzle to work. Julio walked me through implementing the textbox in the puzzle to show which button was pressed by the user. I added in the keypad in the bedroom, set up all the letters with box colliders to make them interactable buttons, and added the hider for that puzzle. I also added in the cabinet under the sink and made it fully interactable.
  + For the video presentation, I presented part B, the state of the game and our accomplishments for this increment. I also put together the video using everyone’s clips.
  + I also drew many sprites for the game like last increment. For the kitchen, I drew the fridge, magnets, cabinets, the rotten food in the cabinets, chairs, sink faucet, and the inside of the cabinet under the sink. For the bedroom, I drew the full length mirror, dresser, plants, funeral suit, grieving card, and keypad.

Alora Clark

* + For the progress report, I looked over it to revise any grammatical errors, but nothing written was contributed
  + For the requirements and design document, I edited number 21 and wrote 22-24 for part 3. I also updated the use case diagram to reflect our changes in this increment, with Melanie’s help for the kitchen portion.
  + For the implementation and testing document, I looked over it to revise any grammatical errors, but nothing written was contributed
  + For the source code, I came up with the idea for the fridge puzzle in the kitchen and for the grieving card/padlock puzzle in the bedroom. I wrote the scripts for the grieving card/padlock puzzle by editing the code used for the previous padlock puzzle found in the living room. I was also able to attach the scripts to the keypad that Melanie set up for me, and was able to have the puzzle work successfully in its entirety.
  + For the video presentation, I recorded section E (the discussion of next steps for increment 3)

Harrison Grimm

* + For the progress report, I wrote the first paragraph of section C. I also contributed to sections D and E regarding the status of game saves.
  + For the requirements and design document, we reused my entries for sections 6 and 7 as these factors remain the same.
  + For the implementation and testing document, we reused my entry for section 2 as this has remained unchanged.
  + I wrote the SceneChanger script which allows for the loading of new scenes when a door is clicked. I modified the Clock script so that the (now disabled) collider for the door to the kitchen would only become enabled once the clock puzzle is completed. I also worked with Julio and Melanie to write and implement the fridge magnet puzzle in the kitchen.
  + I recorded the demo of our application for the video presentation.
  + I drew many additional assets, including: the wire connecting the clock to the kitchen door, the microwave, the stove/oven, the table in the kitchen, and the bed.

Jacob Petrillo

* + For the requirements and design documents, I updated the class and sequence diagrams for section 5.
  + Made the cabinets in the kitchen display the sprite on interaction.
  + For the video, I recorded section A (general overview)

Julio Sarda-Perez

* + Reused some of my contribution for the requirements and design document, as well as the implementation and testing document.
  + I worked with Harry and Melanie to implement the fridge magnet puzzle. I implemented the TV puzzle. I also implemented a rudimentary saved state system.
  + For the video, I recorded section D: Changes in scope.

1. **Plans for the next increment**

For the next increment, we intend on creating the final rooms of the house, the loft, the bathroom, and the backyard. The loft and the bathroom will be the last rooms with puzzles, while the backyard is where the game ends, revealing the character is dead. The loft will connect to the final area of the game via a bookcase puzzle. The bookcase will have a fake book that is really a lever, and the player must figure out which one it is. The hint to this answer is from the fridge magnet puzzle, which spells out “FIREMAN,” referencing the book Fahrenheit 451. We have not pinned down any specific ideas for the bathroom yet, but we may do a puzzle related to a medicine cabinet. It will be filled with several types of medications with a hint being located in the bathroom or another part of the house to indicate which medication is the right one. When the player finds the right one, it will open up a secret panel or a hole in the wall with a small childhood treasure. There will likely be several more interactable items to progress the plot of the story as well.

We also intend on adding in audio for the final increment throughout the house as a way of enhancing the game’s plot. The player will say short lines while interacting with objects, such as “Is this some kind of joke?” while looking at the grieving card. We intend on making more interactables related to the plot throughout the house for the character to react to with voice lines, such as a childhood painting.

Furthermore, we will fix the save and load system so that progress made in a room is kept both when the player loads a different scene and when they exit out of the game. We plan to implement a title screen which will contain options to start a new game or continue from where they left off.

1. **Link to video**

<https://drive.google.com/file/d/1iEYV836oro26sGGLJrPMKOnVdO2vL9wQ/view?usp=sharing>