**Progress Report**

**- Increment 1 -**

**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 mysterious house, trying to find the way out. Using information you find in the different rooms of the house, traverse this mysterious home and unlock the secrets of where you are and how you got here. The story’s end reveals that the player has died, though originally this is unknown to them. Their mind is revisiting some of their more memorable moments and trying to accept the fact they are passing away.

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

In this increment, members of the group who had not used Unity or GitHub before familiarized themselves with these development tools. We began and mostly completed the first room in the game, the living room. Harry and Melanie drew the objects in the room, both mock-ups and final products. We set up the scene once the sprites were finished and began implementing our two puzzles for the scene. The first puzzle implemented was the clock puzzle, with its answer in the newspaper on the table and opens the door that will lead to the kitchen. We successfully were able to get the clock hands moving, allowing the hour hand to change to each hour and the minute hand to shift by five minutes. Once the user puts in the correct time (10:30), the clock locks itself and will open a side door. The other puzzle implemented was the padlock puzzle, which will lead to the bedroom. As for the plot of the game, we decided the main character would be someone who is unknowingly dying. The house is their mind’s way of understanding and accepting this fact, and we intend to place clues throughout the house to hint to this.

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

Some of the most challenging portions of this increment were figuring out the tools and features of the Unity engine. Practice with the system allowed us to add features to the game more quickly, along with watching some videos on Youtube to be more familiar with the application. The logic for the clock puzzle was also somewhat difficult to figure out, as the equation we used to have the game tell us the time was off. It took several tries to get it right, but eventually we corrected and solved the mistake.

We decided not to include a movable character sprite, as we agreed that the game would be more intuitive by using the mouse cursor to navigate. We also originally wanted to have more than one room completed or started at the end of the iteration, but instead, we decided to focus on having the living room as complete and polished as possible for viewing. We felt it was better to have one room as complete as possible to show off as many sprites, interactions, and completed puzzles as possible than three half finished rooms not exhibiting as many completed qualities. It shows we can get things done and have a finished product. Quality over quantity felt more useful to show our progression of our game. We also had some trouble attempting to use multiple branches with Unity, causing issues with Harrison’s Unity application. Twice it seemingly deleted our work on his computer, so we decided to not use branches for the time being.

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

Melanie Bynum

* + For the progress report, I wrote out all of parts 1, 2 and 3. I completed part 4 using Harrison’s content and added my own. I added and elaborated on some challenges we had, such as the clock puzzle and issues with using multiple branches in Unity. I continued writing changes we had for our project overall and for this iteration, including the idea of quality over quantity for the rooms. I worked on part 6, explaining more in detail our plans for the next levels (bedroom and kitchen) of the game. I also described our thoughts for audio and the alternative plan. I finished the video and added the link to the bottom of this report.
  + For the requirements and design document, some of my work from the project proposal was used for the overview in part 1 and I wrote out the entire second paragraph in part 1.. In part 2, I fixed and updated the information in numbers 4, 6, 8, 11, and I added number 7. I helped Harrison on part 7, discussing the assumptions we needed for the game, and adding in details to our paragraph.
  + For the implementation and testing document, I wrote out the entirety of section 1 and added in some details for section 2, including what applications I used for the sprites and that we used the GitHub desktop app. I also added an example to part 3 to give a detailed account of testing.
  + For the source code, I wrote the Clock and ClockHand scripts with the help of Julio. For the Clock script, we made the struct and debug portions together. For the ClockHand, we wrote the OnMouseDown function and started the equations for the Value public int, though he and Jacob fixed it to give us the correct values. We originally had multiple scripts for interacting with sprites, but then Julio and I crafted the general “Interactable” script that we use in the game currently when we want to click on an object in the scene (newspaper, clock, mail). I also added in a few comments to better explain our code. I added in several pieces of furniture to the game and layered them correctly. I added box colliders and scripts to game components, including the newspapers, clock, and clock hands.
  + For the video presentation, I did part E, describing our plan for the next iteration. I talked about the next rooms we will be starting, along with our possible final blueprint. I made the final video by putting together everyone’s clips, added some text to it, and put the link to it in the progress report.
  + I also created several of the sprites we use in the game, including the newspaper (both the table and the full versions), clock, clock hands, couch, table, nightstand, close button, rug, and the tv (currently not being used).

Alora Clark

* + Met with Melanie and Harrison to discuss what should be written and spitball ideas for the progress report
  + Wrote sections 1, 2, 3, and 4 for the requirements and design document
  + Met with Melanie and Harrison and helped make note of which parts needed to be completed for the implementation and testing document
  + Contributed to ideas, but no actual coding for the living room scene; mostly just watched to learn about the system and will be contributing source code to the bedroom
  + Recorded section A for the video

Harrison Grimm

* + For the progress report, I wrote section 4 and 6. Set up the template for section 5.
  + I wrote sections 6 and 7 of the requirements and design document.
  + I wrote section 2 of the implementation and testing document
  + I wrote the initial solution for opening and closing a puzzle/hint, now scrapped. I wrote the scripts for the padlock, padlock buttons, and door referencing, with assistance from Julio.
  + I recorded section D of the video presentation, covering our changes in scope.
  + I created several art sprites including: the room itself(walls and floor), door, side-door, padlock, buttons, a nightstand (scrapped mockup), envelope, letter, and lamp.

Jacob Petrillo

* + Met with the group to discuss the documents
  + Contributed to section 3 of the progress report
  + Made the class diagram for section 5 of the requirements and design document
  + Contributed to ideas for the living room scene; fixed a small error on the clock puzzle that was cleaned up the next day
  + Recorded section B for the video

Julio Sarda-Perez

* + Met with the group to discuss the documents.
  + Wrote the testing methodology for functional and non-functional requirements.
  + Made sequence diagrams.
  + Helped Melanie and Harry write the code for the puzzles, established scene hierarchy, force single child code, padlock text, generalized Interactable / Hider classes, and structured clock / padlock code.
  + Demoed the project for the video.

1. **Plans for the next increment**

We will pair into groups to get a minimum of three more rooms to a functional state. Harrison and Melanie will continue to create finalized versions of the sprites, with the rest of the group creating mockups as needed for their rooms. This includes a kitchen, dining room, and bedroom. Harrison, Melanie, and Jacob plan to create the kitchen and the puzzles along with it. This room is intended to lead to the dining room once completed, though it may also lead to another room depending on time. Alora and Julio will be creating the bedroom, its puzzles, and sprite mockups. We still intend on adding in audio to the game, but if we cannot, we want to at least have little thought bubbles pop up when the user interacts with objects in the room.

1. **Link to video**

<https://drive.google.com/file/d/18FrhDIuPPBQxnyhz2VMQ6d0VBwZ40BwV/view?usp=sharing>