Description of the battery puzzle

The player upon entering the page the player will be encountered with 3 a brief description of the problem, 3 videos and a periodic table image. The player by watching the watching the videos, which are audio only, need to look at the elements that are in the name of the videos, and find in the periodic table the simplified name of the element. Upon finding it the player will re-arrange the words to form the words "ACCEPT" and input the word in the box to solve the puzzle.

The puzzle connects back to the main narrative as it talks about how a battery is needed to keep traveling across universes, the introduction of a character which is present in the collaborative puzzle and its mention of how the Quantum Nexus can overcharge if multiple people are traveling between universes, directly tying into the last puzzle.

Description of collaborative puzzle

The player after inputting the password to unlock the player will find themselves on a page like a terminal page in which they are told the Quantum Nexus is overcharging and they need to fix it. To fix it the players will need to input the name of the scripts which contain the missing variables. To find those scripts the player must input one of the commands to show a script. In that script, there's a link that downloads a .zip file with more scripts. Most of the scripts are corrupt with names being composed of just random numbers and characters, only 4 scripts 4 readable names. In two of those scripts, the player will find the missing variables, and after inputting they will have solved the puzzle with the only choice remaining being narrative-focused with no effects to the puzzle.

Participants role

Bruno- Trailhead, hub page, puzzle hub page layout, connection of puzzles to the hub, page to check if the solution the player input was correct, collaborative puzzle functionality, battery puzzle, manager Trello board, meetings organizer.

Brandon- collaborative puzzle idea and Universe travel puzzle.

Rye- Appearance of trailhead, collab puzzle idea and Anomaly News puzzle.

Charlotte- collaborative puzzle idea and QuanFeast puzzle

Alex - collaborative puzzle idea, puzzle page at hub and Binary Bomb puzzle.

Individual contribution

In the development of the ARG, I created the battery puzzle. It was fundamental as It helped shape the narrative and was one of the reasons the team proceeded with the idea of having all puzzles form a sentence to unlock the final puzzle. The mechanics were created with the idea of taking something that is common knowledge for some people and forcing them to use lateral thinking, by transforming the chemistry elements into their periodic symbols which will give them an anagram that needs to be solved.

With the focus being chemistry, the addition of videos which talk about how to create the narrative of the puzzle makes it more engaging to explain the story about the world while giving hints, making them connect with the narrative more easily. The solution to the anagram needs to be checked on another page that I created that compares what the player input with what is the solution, this page used in most of the ARG.

Self assessment

For this project, while no clear tasks apart from completing your own puzzle were given, I ultimately assumed responsibility of the creation of the trailhead, page in which all puzzles are stored, page to check the solution of the puzzle, and transition of the collaborative puzzle from idea into functional webpage, making me in charge of the overall functionality of the ARG. As the team suffered from a lack of communication outside of class, I scheduled meetings outside of class as they are more productive, and communication is better. While I do believe I went above and beyond what my responsibilities were in the group I believe I could've done better to engage my teammates to help me more with the creation of the ARG process.

Puzzle rationale and process.

Battery puzzle

At the start of the puzzle brainstorming, the player was supposed to be able to choose between two puzzles to connect to the moral dilemma theme. One puzzle would be easier but have a worse outcome, and the other would be harder but have a happier outcome. This idea was good as it followed the parallelism of the puzzle principles by Jesse Schell however, the creation of the puzzles would take a lot of time to solve and connecting them to the main story of the puzzle would be a problem, making it better to focus in one puzzle to guarantee quality over quantity.

The second iteration of the puzzle would have the player hear piano notes and the player would have to repeat the same musical pattern as the one played. This proposed a problem as it didn't connect to the narrative theme and wasn't accessible, as it is impossible to subtitle a musical note.

The last idea before the chosen idea consisted of the player walking through a level developed in Unity. The player would have to investigate different paintings containing images of objects of the same colours, the scene would have multiple paintings with different objects of different colours. After counting them all the player would have to input them in an input with colours that would match the object as a password to solve the puzzle and steal a battery from a big company, implying moral issues.

This last idea was unused as while this could connect to the theme, it would present mostly visual challenges. Apart from not being accessible can be frustrating to some as it only requires a good perception of the player with the minimum logical challenge.

On the final idea of the puzzle, the players would be tasked to listen to 3 audios named after elements from the periodic table, find which symbols they corresponded to, and re-arrange the symbols to form a word.

The players would first encounter some brief text talking about the story behind the battery that contains hints towards the solution of the puzzle.

The periodic table is not a subject of common logic to everyone. A puzzle should only require knowledge that is given to the player or use logic from the game it takes place, like a magic circle effect. So, to obey those rules, the players are supposed to use lateral thinking, using the periodic table not completely as it was intended. With the periodic table, the players are supposed to find the elements from the audio logs and convert them into their symbol, this will make the players have an anagram in which they have to solve.

The audio logs were later changed to video logs after some feedback and the realization that audio is not as accessible to others; the new videos contain subtitles to help with that issue. The video logs contain more story building, explaining how the battery is built. The video hints to the player about the order in which the elements symbols should be arranged, by saying in which order the elements are assembled into the battery, and in the subtitles when talking in which order the elements are added the subtitles are in uppercase, hinting to the player the importance of the sequence.

The player after watching the videos, will be able to re-arrange the symbols, solving the anagram, into the word "accept" which upon entered in the input box will take the player to another page telling them that they solved the puzzle and hinting the player to keep track of their answer as the answer for this puzzle is used to unlock the last puzzle.

Collaborative puzzle

The collaborative puzzle went trough two idea iterations, the first one the player would have to solve smaller puzzles related to the other puzzles solved previously, but this idea was discarded because of the time limit and to focus on quality over quantity.

The second and last iteration the player to unlock the puzzle they have first to complete all the previous puzzles, as all but one puzzle has their solution as a word, that when all together creates a sentence, which is needed to access the last puzzle page, which is locked behind a password. This idea is inspired by puzzled pint puzzles, which do the same, it increases the engagement of the player and the puzzle, giving a sense of progression.

The last puzzle has the player on a webpage like a terminal. The player is tasked with finding the scripts with the missing variables and inputting their names in the input box. The player must analyze the first script to find a link to find other scripts, as players might now know coding well the script is just there for immersion purposes, telling a bit of the story and serving as minor hints. The link itself has a different colour and is in a "square" made from "=" serving as a minor pattern recognition challenge.

The player after finding the link will download a .zip file containing various corrupted scripts with names made from random characters, numbers, and symbols and 4 files with names that make sense, serving as another pattern recognition puzzle.

The player after opening the scripts will find that two of the scripts contain the missing variables that they are looking for.

After inputting the name of the scripts, the player needs to choose between deleting all copies of themselves and the corporation from other universes or resetting all universes but theirs. This part of the puzzle plays on the moral dilemma, as both options stop the corporation, from achieving the goal of the puzzle.

The player will have two options to stop the corporation, the choices rely in moral dilemmas as the player either chooses to delete every copy of themselves and the corporation form all universes, or they reset all

universes but theirs. None of the choices directly affect the player, this was intended to not break the magic circle, the sense of immersion created by the ARG, making the player reflect if what they done was the correct answer.

The hub

In the brainstorming phase the ARG originally had the player solve the puzzles from easier to hardest in a linear style, until reaching the last puzzle. While the idea followed the 5th puzzle principle of increasing difficulty gradually the idea we opted to prioritize agency.

We chose to allow the player to start by any puzzle they find better. One of the other main reasons we made this choice was to follow the 6th puzzle principle, parallelism, from The Art of Game Design by Jesse Schell, which consists of that if the player is stuck in a puzzle you should give the player other parts of the puzzle that they can work on to relieve stress and avoid the frustration of the feeling of hitting a major road block.

Each page of the puzzle contains a brief description of the puzzle, containing hints and a bit of story behind it. Further down the page extra hints for player who find themselves stuck in a puzzle were added, to guarantee the player can finish the puzzle. Only the number of the hint is visible to the player, forcing the player to click on them to reveal the hint, this way the player won't accidentally look at any of the hints and spoil the puzzle.