

Perspective

Team 24 – Project Backlog

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Problem Statement

In recent years, technology has developed far enough to recreate reality within cyberspace. Scenarios selected from real world environments can be easily recorded and replicated using many of the readily available online applications. Our project aims to showcase this ability by creating a 3D simulation of a puzzle labyrinth which would contain both aspects of reality, such as the law of gravity, and phenomena only accessible through virtual reality.

Background Information:

Audience

Virtual reality is a relatively new concept with a moderate lack of development. People disconnected from cutting-edge technologies are not exposed to the many possibilities of virtual reality. Our project focuses on promoting 3D simulations to gamers, virtual reality enthusiasts, as well as novice technology users using the Unity Game Engine.

Similar Platforms

There are several similar virtual reality games already available to play today such as Vox Machinae and Minecraft. Vox Machinae is a 3D first person mecha robot warfare game that is similar to TitanFall, a third-person mecha fps game, while Minecraft is a 3D open world survival game. There are also a variety of other virtual reality games made by third party developers.

Limitations

The biggest limitations and flaws of previously created virtual reality games is that they seem to be too focused on the grandeur element. For example, 3D Minecraft attempted to keep the same art style from previous versions of the game, but the low resolution graphics caused several cases of motion sickness. Vox Machinae addresses this issue by employing stunning graphics but the game itself is too futuristic for the users to connect with. Overall, these games just apply virtual reality to an artificial world. What differentiates us from these games is that our approach will create an altered sense of our reality as we would only be changing some of the physics and gravity in the game.

Functional

1. As a gamer, I would like the game to be fun to play.
2. As a gamer, I would like it to be a game that I've never experienced before.

3. As a gamer, I would like to experience both hardcore and casual gameplay. (if time allows)
4. As a gamer, I would like to see my improvement after each time I play.
5. As a gamer, I would like to have a completion screen when finishing the game.
6. As a gamer, I would like to see a functional navigation system while playing.
7. As a gamer, I would like to see a visible end to the game.
8. As a gamer, I would like to reopen my account and start where I left off last (if time allows).
9. As a gamer, I would like to be able to restart the game.
10. As a gamer, I would like to see a functional website containing information about the game.
11. As a gamer, I would like to see multiplayer functionality (if time allows).
12. As a gamer, I would like to see multiple levels implemented (if time allows).
13. As a gamer, I would like to hear sound effects while playing the game.
14. As a game developer, I would like a functional title screen.
15. As a game developer, I would like to have a save/load game option.
16. As a game developer, I would like to make an account (if time allows).
17. As a game developer, I would like to have the ability to create multiple accounts (if time allows).
18. As a game developer, I would like to have a functional pause menu.
19. As a game developer, I would like to have functional interactions with the environment.
20. As a game developer, I would like functional player movement.
21. As a game developer, I would like to be able to restart the game.
22. As a virtual reality developer, I would like to be three dimensional.
23. As a virtual reality enthusiast, I would like the display to be through a virtual reality headset.
24. As a virtual reality enthusiast, I would like to see this game expand the view on what virtual reality can become.
25. As a virtual reality developer, I would like to see the environment be able to affect the user.
26. As a puzzle enthusiast, I would like the puzzle to be challenging.
27. As a puzzle enthusiast, I would like the puzzle to be interesting to solve.
28. As a puzzle enthusiast, I would like the game to be not too complicated.
29. As a puzzle enthusiast, I would like the puzzle to be a novel idea.
30. As a puzzle enthusiast, I would like a progress bar on how I'm doing (if time allows).
31. As a puzzle enthusiast, I would like a timer to keep track of how long I take.
32. As a puzzle enthusiast, I would like to see puzzles that require connections between field of view and the environment (if time allows).
33. As a first time user, I would like to retain my sense of reality.
34. As a first time user, I would like to experience something not too distant from actual reality.
35. As a first time user, I would like the experience to not give me motion sickness.

36. As a first time user, I would like the experience to be informative.

Non-Functional

1. Be able to download off Steam (as Mac/Windows/Linux computer game) (if time allows).
2. The interface must be user-friendly and easy to navigate.
3. Strong connection between front-end development and back-end development.
4. Implement a strong navigation system to guide players in game.
5. Strong connection between the device running the game and the device hosting virtual reality.
6. Security in the sense that users cannot edit their high score.
7. Security in the sense that users cannot cheat their way through the game.
8. Expand the game by adding different levels (if time allows),
9. Expand the game by adding more obstacles.
10. Expand the game by adding better graphics (if time allows).