P2 - Virtual Verdancy

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Youtube screencast link: https://www.youtube.com/watch?v=wPpFIEP-PYw
Magazine link: Magazine P2

How does this project follow the ART principles?

- Tranquility follows the ART principles simply through the project being based in a national park-inspired environment. However, there are certain instances that allow one to feel more immersed in the experience, such as the details in the environment and the audio to make it seem more realistic so it can feel as if one is looking at nature.

What characteristics make this experience a relaxing environment?

- Tranquility emphasizes enjoying the natural world around you, like taking a walk in the park. It is said that spending time in nature helps with mental illness and stress, so we decided to take inspiration from Tenaya Lake, in Yosemite National Park for our environment. We allow the users to walk and immerse themselves in nature, the lake, trees, and beautiful mountains make for a relaxing setpiece.

What was the goal of your experience and what was the target audience?

- The goal of our experience was to create a relaxing simulation for users of all ages by emulating the tranquil majesty of national parks such as the mountains by Banff National Park and the Tenaya Lake in Yosemite National Park. Our target audience was computer science students who spend a lot of time indoors for projects, research experiments, etc., and who enjoy hiking/outdoor environments such as the parks mentioned. We also are targeting out-of-state students who come from mountainous environments such as Colorado. We wanted them to be able to take a break from whatever it was they were working on (or for out-of-state students, if they were homesick) and quickly transport themselves to a calming and familiar environment without all the costs and time.

Describe the most important characteristics of the environment you developed.

- As for the above-ground environment, the most important characteristic were the shadows, the textures, the mountains, the lake, and the cabin that you can find. Through the shadows and textures, we are able to make the environment seem much more realistic to create a better immersive experience for the user. The lake and the cabin are two landmarks that allow the user to see more than just trees. The mountains are there to supplement the feeling of the environment being a national park-inspired experience, while at the same time supporting the overall look with the trees. In the underwater environment, the most important characteristic is simply the details to make it look as if

you are underwater, and the AI fishes in the scene moving randomly to make it seem more lively.

What interactive features did you implement to achieve your goal?

- Within the environment, the user can interact with the apples and rocks that are on the floor around the environment in the above-ground scene. Then the user can interact with a menu near the lake to go to a scene that simulates the user being underwater, then from there they can interact with a different menu to go back.

What emotions did your simulation elicit?

- Our project elicits a calming, tranquil, relaxing emotional response when playing the game. We try our best to elicit these emotions by "placing" you in the environment using different methods of immersion to truly give you the sense of presence while playing. A great example of one of the methods we used was the soundscape, where we had background noise like wind blowing and birds chirping to give you a better sense of what the environment feels like while playing. Many other methods/contributions allow the user to feel these emotions and allow you to enjoy the peaceful enviornment.

How did you measure the effectiveness of your simulation?

- We used two different groups of people in order to measure the effectiveness of our simulation. The first method we used was the utilization of one of our groupmember's network (a fraternity) with 15-20 people informally trying out the simulation throughout its development to gauge where we wanted to go with the project. The other method we used to gauge effectiveness was during the final showcase of our project where other developers tested out our simulation. Through both methods we were able to gather valuable feedback and understand how effective or simulation was overall.