

Tsunami

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Project Statement:

Climate change has resulted in an increase in the frequency and severity of natural disasters in recent years, causing structural and financial damage to communities hit by such disasters. Our initiative attempts to immerse users in the aftermath of a natural catastrophe in order to better appreciate the fear that these disasters bring. Tsunamis, enormous tidal waves that have inflicted \$300 billion in damages worldwide since 2000, are the focus of our concern. Our objective is to create awareness about the importance and severity of natural disasters and how it can affect anyone. We can provide the user a first-hand experience of what it's like to be in a disaster utilizing VR technology, even if they've never been in one before. Understanding the emotional anguish of having to leave your home to survive is part of the experience, with the intention that the user would see the need for natural disaster preventive services.

Interactions:

The player will traverse through three different scenes. The first scene will depict an environment ravaged by a natural disaster. The player will be prompted to interact with objects around the scene in order to proceed to the next scene. The player can stop smoke from fossil fuels, turn on tsunami systems, and make CO2 emissions disappear. In the second scene, the player will be prompted to collect items all throughout a maze of a room. In the third scene, the

player can interact with houses around the environment to learn, read, and bring more awareness to the devastation and affects of natural disasters. Within each interaction, we made sure that each action the player can take correlates to an action a real person can take during a real natural disaster.

Acknowledgement:

We would like to sincerely congratulate and thank each member of the tsunami group for their hardwork and contridutions during making of this project. We would also like to thank our instructors, Daria Tsoupikova, Andy Johnson, and Jeff Nyhoff, along with IBM, for allowing us the opportunity to work on the CAVE2 system in order to make our project possible.

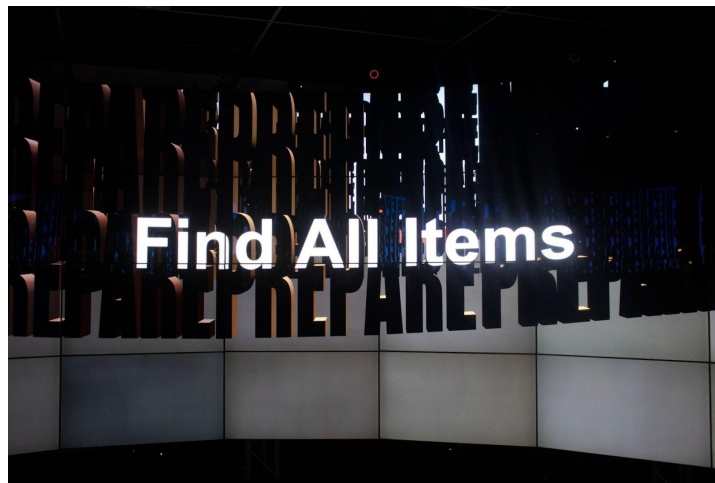
Images:



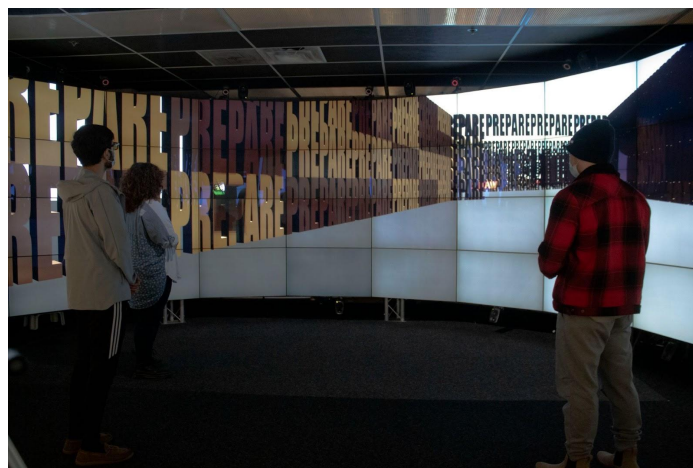
Our first scene. The user will be prompted to walk around the scene to do the task required to progress to the second scene.



Typography will be spread around the first scene to give direction for the player.



After entering the second scene, the player will be given a new task which is to find all items in the scene to progress.



The second scene acts as a maze for the player to navigate.



The third, and last, scene has a more soothing atmosphere for the player to traverse and interact with.



Certain houses in the third scene will have information and facts about natural disaster upon approaching a house.

Collaboration (Tasks and Responsibilities):

- Caleb
 - Scene creation (in scene 1 and 3)
 - Cave2 implementation
 - Documentation
 - Interaction scripts:
 - Invisible walls
 - Siren sounds when colliding
 - Pop up text boxes
 - Teleportation between scenes
 - 3d sounds in certain areas of scenes
 - Audio sources
 - Ambient sounds
 - Sky background (in scene 1)

- Het
 - Typography designs
 - Cave2 implementation
 - Interaction scripts:
 - Pop up text boxes
 - Audio sources
 - 3-scene concept
 - Video taking

- Paula
 - Scene creation (in scene 2)
 - Video creation
 - Interaction scripts:
 - Door opening
 - Item destruction
 - Maze concept (In scene 2)
 - Texture finding

- Dulce
 - Scene creation (Assets from an unused scene is used in other scenes)
 - Typography designs
 - Interaction scripts:
 - Movement of CO2 emission gameobject
 - Audio sources
 - Tsunami/flood concept
 - Texture finding
 - Photo taking