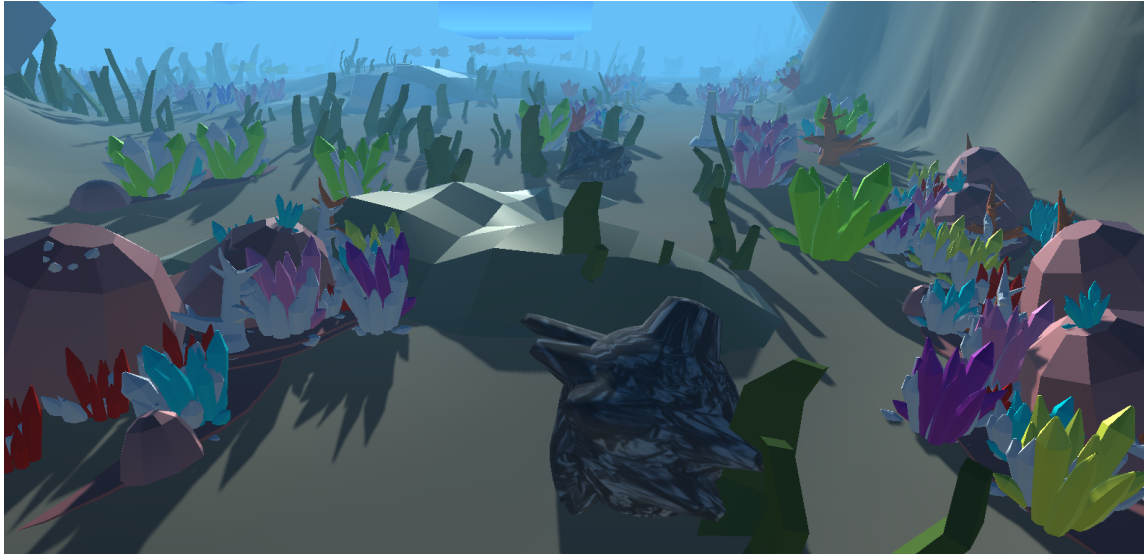


Pollutants

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The ocean faces a great threat. The impact of human activity has killed and destroyed millions in sea life and nearly 8 million metric tons of plastic is dumped into the ocean annually. This waste can have devastating effects to both natural habitats and animals.

Pollutants is a virtual reality exploration using CAVE 2 technology emphasizing and educating the user on the impact of ocean pollution and the harmful effects caused by human actions. Using advanced 3D modeling, the user spawns at the beginning of the environment, surrounded by the fish bones, decaying rocks and bleached-coral life. As the user progresses through the environment the user begins to collect trash that is scattered around in various areas. As the user collects the trash it initiates the cleaning process, repairing sea life and bringing back color to it. This simulation helps recreate the deep cleaning process emphasizing how important it is to protect nature and animals.

Throughout the project we focused on having our aesthetics revolve around a low poly look, creating a simple yet appealing environment to adolescents and adults. This made pollutants have a cohesive look overall. Containing geometrics shapes, harsh lines, and bright colors. The garbage was created through a process of using both Adobe Illustrator and Maya. First we created a basic 2D vector translation, and then after we imported it into Maya which we used to create 3D models.

Each group member had a specific task to complete.

Brandon was in charge of creating the terrain of the map as well as the placement of important interactive assets (trash, coral, etc). The purpose of these tasks was to create a user experience that was both understandable as well as purposeful.

Chris was in charge of polishing and correcting the proportion of each object. Scaling it to size and creating a more interactive piece for the player to adventure around. Chris also had to curate the environment to ensure that the player is able to explore the environment around them, rather than exploring the environment in a linear path.

Nour was in charge of the coding. She coded the collisions between player and garbage. When the player collided with the garbage it would disappear and the coral would change color. The fish's movement was also Nour's job.



