

breathe

As industrial development keeps growing, the amount of air pollution that is being released into the air increased exponentially. The concept of “breathe” started after the observation of the Air Quality Index (AQI). The AQI is an index that shows the air quality in given areas around the world. It provides information about how polluted the air is as well as the number of pollutants in the air. The aim of the project is to allow the user to experience the hardness of breathing, understand the pollutants that they are breathing in every day, and be aware of the causes of air pollution. The concept is to allow the user to experience the polluted environment and with collision, the user needs to clean up the pollutants to teleport to a cleaner air environment.



The game begins with the player free flying in the air. The user uses the wand to move around the air. The environment is filled with type with a variety of fonts. These letters are the pollutants and causes of pollutants. As the user flies around the most polluted environment, the words (pollutants) will disappear when the player and the words collide. After cleaning the air, the user will teleport to a cleaner air environment. This second air environment has fewer letters and is in a different color. The user will clean up the air again to teleport to a new air quality. The last air quality environment will have fewer letters compared to the second environment.



Each environment represents a different air quality and the differences are represented in color, sound effects, and word placements. The worst air quality is represented by the color purple with a lot of sound effects like coughing, hard breathing, shortness of breath. Thus, the more crowded the words are, the more overwhelming the environment. The second air quality is represented by the color red but with fewer words to create a less overwhelming feeling. Although hard breathing and shortness of breath sound effects are available, it is not as overwhelming as the first environment. The last air quality environment is the cleanest environment, represented by pastel colors and low opacity to create a calm and peaceful feeling. In addition, calm and wind chime background sound effects are added to create a soothing sensitivity.



In the game, the user is able to experience and interact with the air pollutants, therefore at the same time, learn about the chemicals that we are breathing in. By cleaning the air in different air quality environments through the use of collision, the user will be aware of the amount of pollutants in each environment. Thus, the user will understand that we should clean up the air by reducing the amount of pollutants being released as it is impacting not only to human health but also to the overall life quality. In addition, sound effects of a person coughing and having a hard time breathing impacts the user's feeling, as it is terribly overwhelming. The sound effects allows the user to experience the feeling of being hard to breath and hard coughing. User will then understand the impact of air pollutants to our health. The game is created to make the user cleaning up the air and see the improvement in the air quality as they teleport to a better environment, encouraging them to participate in improving the air quality in their local area.

In this project, Elizabeth Hernandez participated in the production of three(3) scripts: teleportLevel, cleanAir, and rotateAround. Hernandez also created the part of the texts in Maya and imported them into Unity. Throughout the process of refining the game, Hernandez actively help out with placing the words into their environments and importing sounds into texts. Using the script that she made, Hernandez applied the script for teleport to words. Thus, Hernandez had contributed in fixing some other scripts as well as giving feedback to other members' work. For the project final review, she used photos and videos taken and putted together our project trailer.

Jocelyn Diaz produced two(2) scripts: collusion and scaledown. She had created words in Maya and imported them into Unity. Diaz, too, had placed the colored text into their correlated environment. She had incorporated the sounds into their correct texts, edited sound effects in Audacity, adjusted the collision box, and included the background sound effects to the game. Furthermore, Diaz had helped out with other members' work and give constructive feedback. For the project final review, Diaz participated in creating the slides.

Trang Lan Anh Nguyen produced one(1) script: rotation. She also created 3D words in Maya and imported them into Unity. Nguyen participated in fixing the scripts, placing the letters into their environment, applying sounds into words, editing sound effects in Audacity, and adjusted collision sound boxes for words. Thus, she gave feedback to members' work to improve the project overall. For the project final review, Nguyen contributed to writing the Project Statement and took images.

Dr. Daria Tsoupikova had helped refining the project as she included some scripts that helped with the game operation.