

Virtual Reality Project: **Menace of the Deep**

Group 1
Deep Blue

Description

- ❖ Make a Virtual Reality (VR) immersive experience
- ❖ Play as a fish
- ❖ Explore a coral reef
- ❖ View the effects of ocean pollution



Goals

- ❖ Raise awareness about the severity of ocean pollution
- ❖ Encourage players to question their lifestyle habits
- ❖ Encourage players to handle their waste properly
- ❖ Empathy



Learning Outcomes

The effects of pollution:

- ❖ Fish eat plastic, choke and die
- ❖ Debris in water trap fish
- ❖ Food becomes scarce
- ❖ Coral reefs die
- ❖ Loss of biodiversity



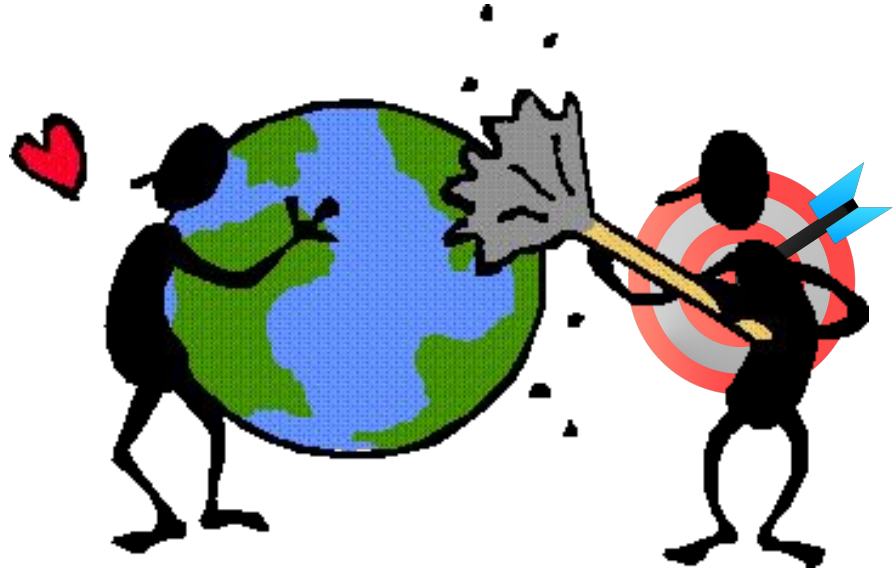
Importance

- ❖ Coral reef habitat biodiversity
- ❖ Plastic does not biodegrade
- ❖ Make fish unsafe for human consumption
- ❖ Threaten livelihood of coastal communities
- ❖ Can lead to extinction of species



Target Audience

- ❖ All Ages
- ❖ Casual gamers
- ❖ People who don't know much about environmental issues



Why is it Interesting? Unique?

- ❖ Experience it first hand
- ❖ You are literally a fish get to move around freely
- ❖ Both educational and fun
- ❖ Empathy



Demonstration

Design Considerations

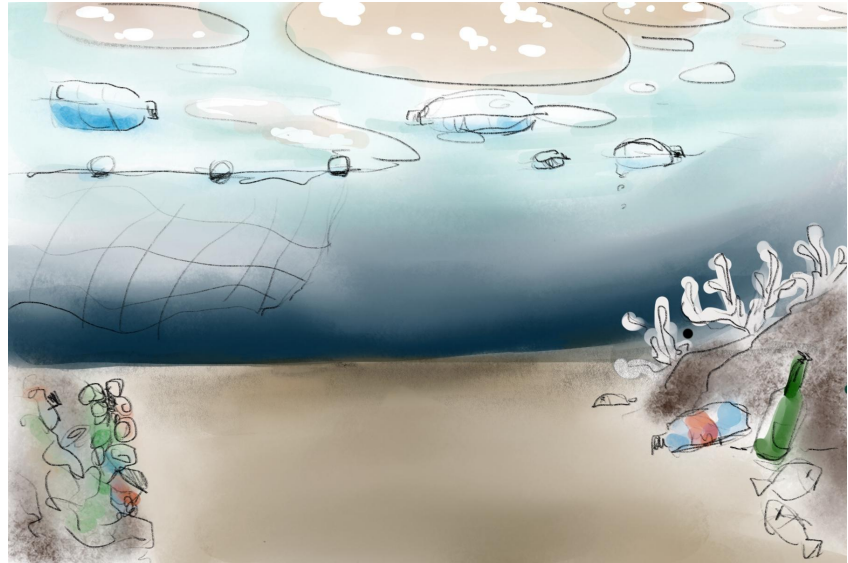
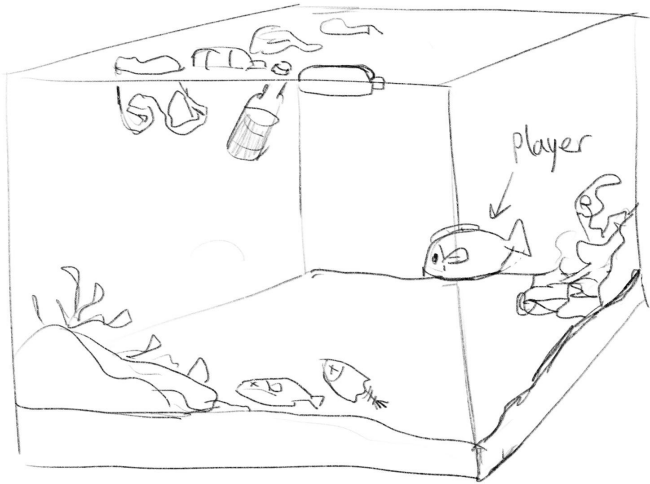
- Ideation
 - Sketching
 - Building the scene
 - Constant Improvement
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Ideation

- Our idea is about marine pollution happening in recent years
- Show our concept by showing a visual marine scene -- shallow ocean area with coral reef
- Why coral reef? -- most biodiversity
- Apply time changing idea -- how it changes over time
- Create linear scene like in a RPG game — let the players experience “time” as they go through the scene

Designing the scene from scratch

- Sketches for our initial idea of how the scene may look like



Designing the scene from scratch

- The idea is to make a wide scene that players get to explore
- Applied program on different elements to make players feel the time lapse more directly while they're playing
- Applied animation and surrounding audio to make the scene as realistic
 - Better immersive experience!

References

Denchak, M. (Jan 22, 2018). Ocean Pollution: The Dirty Facts. Retrieved November 9, 2019,
from <https://www.nrdc.org/stories/ocean-pollution-dirty-facts>