

## Neptune's Knights (MS-136)

Describe how your team is giving back to the community and why do you think it is important? Neptune's Adventurer Simulator is a free first-generation simulation video game created to reach and teach as many players as possible about the important issue of the ill-effects of pollution in our waterways through gaming. In this iteration of the game, the player controls Neptune's Adventurer and picks up trash around the ocean.

This game was created to teach players about the concerning amounts of plastics in the ocean while having fun trying to complete a task. This game encourages players to make connections by taking what they have learned from the game, and applying it to the real world. The goal is to get players to alter their behaviors as a result. For example, players might spread the word about this issue, or go out of their way to recycle/reuse. This process of learning and applying lessons to the real world could especially work for younger players of the game, but is accessible players of all ages.

Our team believes that games that educate players about real world problems such as Neptune's Adventurer Simulator are important because they allow players to not only develop an understanding about the issue, but also take steps towards solving the problem. These games are also important because they encourage critical thinking. Further, gaming is the perfect outreach tool in 2021. Gaming immerses players in ways that just reading about an issue or watching a video does not. Educational games, like Neptune's Adventurer Simulator, create opportunities for players gain an increased awareness of any issue, as long as there is an acceptable balance of gameplay and information.

Future iterations of this game will reveal additional challenges related to weather and ocean conditions making water cleanup efforts even more challenging as reflected in real life. In order to further justify the sense of urgency of the devastating situation in players, a "beat-theclock" style time-limit component will be added as well. Another future feature will give the player the ability to change the location of the cleanup, using GPS sensor modifications, which will illustrate to the player that this is a global issue. Finally, additional angular camera modifications will be made available at the players' discretion that would help detect underwater debris for removal. In addition, players will also be presented with opportunities to earn points throughout the game by spreading the word about the issue, recycling (virtual) materials, and, in some instances, reusing items – further stressing the need to be a responsible citizen. As the players level-up, they will receive medals for their service, bravery, merit and achievement. A final consideration on the table is to share the code to this game with prospective users. This would allow users to build on and personalize the game – or create their own versions of the game. We feel this would develop a sense of ownership in the game as well as

the issue of trash clean-up and provide a sense of connectedness which would be a solution-oriented approach.

## Supporting Resources:

https://scratch.mit.edu/projects/519808338







