

Gameplay

The game takes place on a square map of ocean with a single island in the center. The player begins the game at the island and can move to any area of ocean within the map. Moving from the start location triggers a game timer, within which the player has to collect as much rubbish as they can.

Pieces of rubbish are spawned randomly throughout the ocean areas of the map at the beginning of the game and the player collects a piece by moving to it and staying in proximity to it until a short collection timer has elapsed. The piece of rubbish then despawns from the game world and an amount of weight will be added to the player's carrying capacity, depending on the type of rubbish. Once the player's carrying capacity is full, they have to unload the trash onto the island at the center of the map before they can continue collecting rubbish.

A minimap of the world is available to the player where they can see their current location and the location of pieces of rubbish that they are within a detection radius of, allowing them to plan which rubbish to collect and how to get back to the island.

Feedback

During the game, areas of ocean with a lot of rubbish are visually "corrupted", for example the colour of the water could be dirty and there would be no visible wildlife. When the player removes the rubbish, the colour of the water returns to a more natural colour and wildlife such as starfish/seaweed are visible on the sea floor. This could be implemented by having separate textures for uncorrupted and corrupted water/seafloor which will switch depending on the amount of rubbish in the vicinity.

When the game timer has elapsed, the player is no longer able to collect and is presented with a summary of the game. This includes a measure of how much rubbish they were able to collect and some statistics about ocean pollution. An additional metric could be an estimate of the effect of collecting that much rubbish in the real world, e.g. assume the player has collected 50kg of rubbish, what kind of effect would that have on the marine wildlife and vegetation in real life.