

Description of Diagram Two

In this diagram, we illustrate the game board when a collision occurs between a player fish and a shark.

The game may have reached this state in either of two cases.

Case one: The player moved the fish into the position already occupied by a shark

Case two: The shark thread updated its position moving it into the area occupied by the fish.

In either case, once the board receives the input from either the fish in the first case or the shark in the second, it will first determine whether there is a collision before returning the updated board. It would see that portions of both a fish and a shark are overlapping, therefore it will send a message to the player client indicating that there was a collision and update the all the player's display with the fish removed and the player's loss displayed afterwards.