

# Test Plan

These are test plans for the game. The test plan will cover all basic and advanced game features used and show the outcome of each action performed.

## TEST NUMBER 1 - Starting the Game

## TEST NUMBER 2 - Movement

## TEST NUMBER 3 - Collision

## TEST NUMBER 4 - End Game

Test Number	Description and Case	Expected Result	Actual Result
1.1	Game displays message boxes explaining the instructions to the game.  The player needs to read and click "OK".	Displays the following:  "Welcome to RekoCorp's Fishing Game!"  "You need to collect all the fish but be careful of the sharks."  "If a shark hits the boat, or the fish reach the boat, it's game over. There's 16 to catch. Good luck!"	As expected.
2.1	The player's character moves left and right.  Player can do this by using their left and right arrow keys.	The player moves left and right, and do not fall off the edge.	As expected.
2.21	The fish move left and right.  The algorithm within the program should move them left and right	The fish move left and right, and do not fall off the edge.	As expected.

## RekoCorp's Fishing Game

2.22	The fish move up gradually, eventually reaching the boat.	When the fish collides with the edges, the fish move up.	As expected.
2.3	The shark move up to the sea surface.	The shark comes from the bottom of the sea to the surface, then disappear and respawn.	As expected.
2.4	The hook moves down and when the player releases the down key, the hook reels up.  The player must use the down arrow key to drop the hook.	When the player releases the down arrow key, the hook will reel back.	As expected.
3.1	The fish attaches to the hook.	The fish's x and y position will be equal to the hook's position.	As expected.
3.2	When the fish is reeled in and caught, the score tally increases, and the fish disappear.	The counter variable will increase by 1 and the fish will disappear.	As expected.
3.3	When fish are caught in multiples of 2, the game will increase level and difficulty.	When the counter reaches 2, then 4, then 6, then 8, the level counter will increase, and the difficulty will increase as more sharks shall spawn.	As expected.

## RekoCorp's Fishing Game

4.1	When all fish are collected, the player shall win.	A message shall display, alerting the player that they won the game. The game would then restart.	As expected.
4.2	When the fish reach the surface and collide with the boat, the game shall end.	The fish should collide with the boat, and when it does, a message box saying "Game over" will display. Then the game will restart.	Errors occur. The fish do not collide with the boat.