Fish Boid Project
Test Specification

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1 TEST PLAN

Tests should be written in a story-by-story basis, testing the specific behaviours of that story works. Because of the nature of my program, it will be done without automated tools like Junit, since my program is mostly visual output. The pass criteria of each test will be recorded in the final state of the program only so the finished state of the program can be understood so I know what needs improved after based off it.

2 TEST SPECIFICATIONS

Test Ref	User story	Test Content	Input	Output	Pass Criteria	Result
FBP-001	US1	Check that when a fish button is selected, it is highlighted green and all other buttons possibly highlighted are unhighlighted.	Red fish button selection selected.	Currently selected yellow fish button unhighlighted and red button highlighted.	The red button is highlighted green, and all other selected buttons are unselected.	P
FBP-002	US2	Check that when a shark button is selected, it is highlighted green and all other buttons possibly highlighted are unhighlighted.	Black shark button selection selected.	Currently selected red fish button unhighlighted and the black shark button highlighted.	The black button will highlight green, and all other buttons will unhighlight.	P
FBP-003	US3	Check a fish spawn at the point the mouse clicks if its within the board dimensions and doesn't overlap other fish.	Mouse click within border boundaries in an empty space.	Fish spawned at position of a valid mouse click.	A fish will spawn only in a valid position at the mouse click.	P

FBP-004	US4	Make sure a fish randomly moves around the board swerving other types of fish and the border/	N/A	Fish does as expected in the test content.	Fish does as expected in the test content.	P
FBP-005	US5	Make sure 2 or more fish of the same type school together when close.	N/A	Fish does as expected in the test content.	Fish does as expected in the test content.	P
FBP-006	US6	Ensue 2 different fish schools of a different colour don't clash together and form another school.	N/A	Fish does as expected in the test content.	Fish does as expected in the test content.	P
FBP-007	US7	Check a shark spawn at the point the mouse clicks if it's within the board dimensions and doesn't overlap other sharks.	Mouse click within border boundaries in an empty space.	Shark spawned at position of a valid mouse click.	A shark will spawn only in a valid position at the mouse click.	P
FBP-008	US8	Ensure a shark seeks the closest fish object.	N/A	Shark does as expected in the test content.	Shark does as expected in the test content.	P
FBP-009	US9	When a shark touches a fish ensure the fish is removed from the board.	N/A	Shark does as expected in the test content.	Shark does as expected in the test content.	P
FBP-010	US10	Ensure fish flee from the shark regardless of schooling before running schooling behaviour again.	N/A	Fish does as expected in the test content.	Fish does as expected in the test content.	P

DOCUMENT HISTORY

Version	Date	Changes made to document	Changed by
0.1	23/06/25	Setting up basic document structure.	Jacob Broomfield
0.2	28/09/25	Filling out test criteria.	Jacob Broomfield
1.0	30/09/25	Carrying out tests and finishing document.	Jacob Broomfield