

# Final Project Proposal: Water Animal Memory Game

## Overview

The **Water Animal Memory Game** is an interactive, web-based application that combines visual and auditory elements to challenge and improve memory skills. Designed with HTML, CSS, and JavaScript, the game offers multiple modes to engage players in different types of memory-based challenges. Each mode uses colorful animal images and unique sounds to create a fun, ocean-themed experience.

## Game Modes

1. **Location Memory** – Players see where animals appear on a grid, and must remember and click those locations after they are hidden.
2. **Number Order** – Numbers are shown briefly, then hidden. Players must click them in the correct order from 1 to 9.
3. **Sound Match** – A sound plays and players must identify which animal made the sound by clicking the correct image.
4. **Pattern Repetition** – A sequence of animals is presented. Players must click the animals in the same order to win.

## Target Audience

This game is aimed at students and casual gamers who enjoy light, cognitive challenges. It can also serve as a fun educational tool for younger children learning about marine life and improving memory.

## Planned Fifth Game Mode

5. **Timed Challenge** – Players must correctly match or repeat animal patterns within a set time limit. This mode adds pressure and excitement by combining speed and memory.

## Improvements and Features to Add

1. Add the **Timed Challenge** mode with a countdown timer and score tracking.
2. Save and display **high scores** for each game mode.
3. Add **theme customization** options (e.g., background color, music toggle).
4. Improve **visual clarity** by enlarging clickable animals during active selections.
5. Add more **water animal characters** to increase variety.
6. Implement **difficulty settings** (easy, medium, hard) that change grid size or speed.
7. Include **background music** and a mute button.
8. Add a **game over** screen with results and replay options.
9. Include a **start screen/menu** to explain rules for each mode.

10. Save **game progress** locally so users can resume later.