

TIC TAC TOE PROJECT

DOCUMENTATION

Project: Tic Tac Toe Game

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1. Introduction

This document provides detailed documentation for the Tic Tac Toe game project developed as part of the internship requirements. The game is a classic two-player board game implemented using HTML, CSS, and JavaScript. The project has been designed to be user-friendly, visually appealing, and responsive across devices. In addition to fulfilling the basic requirements, several bonus enhancements have been added to make the project more attractive and engaging.

2. Features Implemented (As per Requirements)

The following features were implemented to meet the internship requirements:

- A 3x3 grid-based Tic Tac Toe board.
- Two-player functionality (Player X and Player O).
- Display of current player's turn.
- Game ending with a win or draw message.
- Option to restart/reset the game.

3. Additional Enhancements (Bonus Features)

Beyond the required features, the following improvements were added:

- 🎵 Sound Effects: Different sounds for X, O, Win, Draw, and Wrong clicks.
- ✨ Animations: Pop effect when placing X or O, glow effect for winning cells, and shake effect for invalid clicks.
- 📊 Scoreboard: Tracks multiple rounds showing Player X wins, Player O wins, and draws.
- 🎨 Improved Styling: Attractive CSS with hover effects and responsive design using CSS Grid and Bootstrap.

- 💡 User Experience: Clear status messages and smooth transitions for better interactivity.

4. Technology Stack

- HTML – Structure of the game.
- CSS – Styling and animations (with Bootstrap integration).
- JavaScript – Game logic, interactivity, and scoreboard.
- Audio – Sound effects for better user experience.

5. Setup and Installation

To run the project locally, follow these steps:

1. Download or clone the project folder.
2. Ensure the following files are present: index.html, style.css, script.js, and a 'sound' folder with audio files (X.wav, O.wav, Win.wav, Draw.wav, Wrong.wav).
3. Open index.html in a web browser.
4. Play the game by clicking on the cells of the grid.

6. How to Play

1. Player X always starts the game.
2. Players take turns clicking on empty cells to place their mark.
3. The first player to align three marks (row, column, or diagonal) wins the round.
4. If all cells are filled without a winner, the round ends in a draw.
5. The scoreboard automatically updates after each round.
6. Click the Restart button to begin a new round.

7. Conclusion

This project demonstrates proficiency in web development using HTML, CSS, JavaScript, and Bootstrap. It fulfills the internship requirements while also including enhancements like sound effects, animations, and a scoreboard to create a more interactive and enjoyable user experience. The project highlights not only the ability to follow specifications but also initiative and creativity in delivering beyond the expectations.