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DGMD E-28 – Developing Single-Page Web Applications
Assignment 2 – Tic-Tac-Toe
Spring 2022

Web Link: https://dcardonab.github.io/DGMDE-28_SPA/assignments/A2/assignment2.html

The section of code that I'm most proud of is the communication between Javascript and CSS. I set an `empty` class to change background color as the player hovers over empty cells. When a cell is played, the `empty` class is removed (removing the hovering effect), and an `X_player` or an `O_player` class is added to indicate the color of the displayed text. If the player plays an occupied cell, they are notified that the cell is occupied. The manipulation of classes can be seen in the `play_move` function below:

```
function play_move() {
    // Only allow user to input moves in PLAY state
    if (PLAY_STATE) {
        cell = this;

        // Clear messages on each move
        document.getElementById('messages').innerHTML = '';

        // Make move only if cell is available
        if (cell.classList.contains('empty')) {
            if (CURRENT_PLAYER === 'X') {
                // Style and add player's the icon
                cell.classList.add('X_player');
                cell.innerHTML = 'X';
                CURRENT_PLAYER = 'O';
            } else {
                cell.classList.add('O_player');
                cell.innerText = 'O';
                CURRENT_PLAYER = 'X';
            }

            // Make cell unavailable
            // This will also prevent changing background when hovering
            cell.classList.remove('empty');

            // Check if the move caused a player to win.
            check_winner();
        }

        else
            display_message("You must play an empty cell!");
    }
}
```