**Cross Wordle Presentation Script**

**The game that I have created** for this competition is called Cross Wordle.

It is like Wordle but takes the gameplay to the second dimension with a full crossword-style puzzle connecting words and ideas, each being a puzzle of their own.

**I chose to make this game using JavaScript** on an HTML page. This is because of the plethora of design features that HTML has to offer, and the seamless communication between the front and back-end of the webpage.

An alternative option would have been using a fully-fledged game engine, like Unity. I chose not to do this because I like the speed and ease of playing a game on the web when it is made with HTML and JavaScript.

**I designed this game** to play like a regular crossword puzzle, but instead of getting hints for each word, the player must make educated guesses based on letters given from other words, and previous guesses. This concept is taken from Wordle and expanded upon to create a more challenging game experience.

**I will now go into greater detail** on how the game is played.

To select a word to begin working on, the player must hover their mouse over the desired word, and it will highlight, as shown in the first picture.

**Upon clicking the word**, a panel will open containing a Wordle-like puzzle, for this word.

**The player may type** using their physical keyboard, or the on-screen keyboard to enter letters.

Once the player presses Enter, the guess will be spellchecked, and if it is a word, it will be submitted as a guess.

Like Wordle, green letters are correct, orange letters are in the incorrect place, and red letters are incorrect.

The top row of spaces contains letters found by guessing on other words, so that the player doesn’t have to remember what they’ve already found.

**Once the player correctly guesses** all the words, the game will automatically finish, or they can decide to finish early by clicking the “Finish Game” button at the top left.

Score is calculated as follows:

* Green Letters: 5 points
* Orange Letters: 1 point
* Red Letters: 0 points

If the player is within the top five players based on their score earned, they will be displayed on the leaderboard.

**Here is a code snippet** that demonstrates how the game determines the correctness of each letter in a guess. The reason it is more complicated than a simple if-else tree is because I want to make sure that the amount of a letter in a word is accounted for when determining if a letter is orange or red. **The picture I am showing you here** is an example where this code is crucial. You can see that the correct word is “WORLD”, but the player has guessed “HELLO” prior to their last guess. The word “HELLO” has two Ls, while the word “WORLD” only has one. **Here is the same function** created with a simpler approach. **A simple if-else tree** would determine that the first L in the guess should be orange because there is an L in the word, as shown in this picture. The problem is that this may lead the player to believe that there are actually two Ls in the word. My approach fixes this by checking how many of each letter is in the word, and if a letter count in a guess exceeds the letter limit for the word, all subsequent instances of that letter will be red, instead of orange.

**For the art style**, I went through many design variations for this game, but ended up going with a simplistic, yet colorful design.

The background is a chalkboard-green that makes the colors of the letter spaces really stand out.

I wanted to keep the design simple, so that the user can focus on solving the puzzle, without any distractions.

**You can also save your game state** as a file, so that you can leave and return to play later.

This feature also allows you to load custom puzzles, which can be created using the feature I will show next.

**Using a tool that I created** alongside the game; you can create your own puzzles for others to try out.

You can also edit existing puzzles, to make your ideal puzzle.

These puzzles can then be loaded into the game, just like a save file.

**That’s all** for my game presentation, thank you for your time.