

Week 4 Report

Example of Existing Game with similar idea:

https://www.abcya.com/games/guess_the_number

- This game does provide the correct solution after 5 incorrect guesses.

My Project:

- Since the code (solution) is randomly generated in the first place and stored for the purpose of helping generate the correct hints, there is not much to do in the way of solving. After a user runs out of hints, they can request a solve, which will go through their final round of guesses, highlighting correct ones in green and replacing incorrect ones with the correct digits, highlighted in blue.
- It's an optimal solution, as there is a correct code to check guesses against, so there is no need to go in and solve it from the programming end.
- Estimated time complexity: $O(1)$, as we are comparing data of set sizes (the length of the code, and number of digits the user can guess are consistent and the same every time).