

Assignment 4

Group Assignment

Introduction:

Wordle is a word-guessing game where players try to guess a secret word by suggesting words. The game provides feedback on the correctness of the guesses, marking correct letters in the correct position with a specific symbol and incorrect letters with a different symbol. You can play this game in the [nytimes website](https://www.nytimes.com/games/wordle/index.html).



How To Play

Guess the Wordle in 6 tries.

- Each guess must be a valid 5-letter word.
- The color of the tiles will change to show how close your guess was to the word.

Examples

W **E** **A** **R** **Y**

W is in the word and in the correct spot.

P **I** **L** **L** **S**

I is in the word but in the wrong spot.

V **A** **G** **U** **E**

U is not in the word in any spot.

1. Game Initialization:

- Generate a random word for the player to guess. You can access the predefined set of words named "all_words" provided in the "Wordle_TeamX.ipynb" notebook.

2. User Input:

- Allow the player to input their guesses, ensuring the input is valid (e.g., a five-letter word). Handle edge cases and provide appropriate feedback.
- Ensure that the comparison between user guesses and the secret word is case-insensitive. It should not matter whether the letters are entered as capital or lowercase.
- If the user inputs a word that does not exist in our database, return a response indicating that the word is not acceptable.
- An unacceptable word should not decrease the count of allowed tries.

3. Feedback Mechanism:

- Compare the player's guess with the secret word and provide feedback.
- Mark correct letters in the correct position with a specific symbol.
- Mark correct letters in the wrong position with another specific symbol.
- Mark incorrect letters with a different symbol.

4. Game Loop:

- Implement a loop that allows the player to guess multiple times until they either guess the word correctly or reach a maximum of 6 attempts.

5. Win/Loss Conditions:

- If the player guesses the word correctly, display a congratulatory message indicating how many attempts they took to guess the word correctly.
- If the player exceeds the maximum allowed attempts, reveal the correct word and display a message indicating the game is over.

6. User Interface:

- Create a simple text-based interface for the game. You do not need to implement a graphical user interface (GUI).

Submission:

- This project is a group assignment. Each team should collaborate to complete the Wordle game project.
- Teams are required to submit their notebook file with the following format:
`Wordle_TeamX.ipynb`, where X represents the team number. For example, Team 1's file should be named `Wordle_Team1.ipynb`.