WORDLE

DESCRIPTION

Wordle is a game where a player has 6 chances to guess a 5-letter word correctly.

RULES

- If a letter in a guess exists in the target word, and is in the correct spot, it is colored with a green background.
- If a letter in a guess exists in the target word, but is not in the correct spot, it is colored with a yellow background.
- If a letter in a guess does not exist in the target word, it is colored with a gray background.
- If there are multiple occurrences of the same letter in a guess, only the number of occurrences of that letter in the target word are colored appropriately. Some examples:
 - If the target word is "reply" and the player guessed "curry", only the first 'r' in "curry" would be colored yellow, and the second 'r' would be colored gray.
 - If the target word is "entry" and the player guessed "curry", the second 'r' in "curry" would be colored green, and the first 'r' would be colored gray.

PROGRAM

Your task is to create a Wordle clone. A dictionary of valid target words will be provided for you. When a player starts a new game, a target word is chosen at random.

If your program outputs to a terminal or console, use the following characters:

- 'X' denotes a character that was guessed that does not exist in the target word.
- 'Y' denotes a character that was guessed that exists in the target word, but not in the correct spot.
- 'G' denotes a character that was guessed that exists in the target word and is in the correct spot.

For example, if the target word is "audio" and the player guessed "guard", the output would be "XGYXY".

Implement a menu system that allows the player to play indefinitely.

Bonus

Implement a GUI. The letters in a guess should be colored appropriately.

Allow the player to start a game in Hard Mode. In Hard Mode, a player may not use letters that were colored gray in previous guesses.

