Hangman Game - Python Project

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import random

# List of 5 predefined words
words = ["apple", "tiger", "house", "robot", "plant"]

# Randomly choose a word from the list
secret_word = random.choice(words)

# Create a list to keep track of guessed letters
guessed_letters = []
# Create a variable for the number of allowed incorrect guesses
max_attempts = 6
# Counter for wrong guesses
wrong_guesses = 0

# Create the hidden word with underscores
display_word = ["_" for _ in secret_word]

print("Welcome to Hangman!")
print("Guess the word, one letter at a time.")

# Main game loop
while wrong_guesses < max_attempts and "_" in display_word:
    print("\nWord: " + " ".join(display_word))
    print(f"Wrong guesses left: {max_attempts - wrong_guesses}")
    guess = input("Enter a letter: ").lower()

    if not guess.isalpha() or len(guess) != 1:
        print("Please enter a single valid letter.")
        continue

    if guess in guessed_letters:
        print("You've already guessed that letter.")
        continue

    guessed_letters.append(guess)

    if guess in secret_word:
        for i in range(len(secret_word)):
            if secret_word[i] == guess:
                display_word[i] = guess
        print("Good guess!")
    else:
        wrong_guesses += 1
        print("Wrong guess!")

# Game over messages
if "_" not in display_word:
    print(f"Congratulations! You guessed the word: {secret_word}")
else:
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    print(f"Game over! The word was: {secret_word}")
```

Sample Output

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Welcome to Hangman!
Guess the word, one letter at a time.

Word: _ _ _ _ _
Wrong guesses left: 6
Enter a letter: e
Good guess!

Word: _ _ _ _ e
Wrong guesses left: 6
Enter a letter: o
Wrong guess!

Word: _ _ _ _ e
Wrong guesses left: 5
Enter a letter: t
Good guess!

Word: t _ _ _ e
Wrong guesses left: 5
Enter a letter: i
Good guess!

Word: t i _ _ e
Wrong guesses left: 5
Enter a letter: g
Good guess!

Word: t i g _ e
Wrong guesses left: 5
Enter a letter: r
Good guess!
Congratulations! You guessed the word: tiger
```