

Code:

```

hangman.py - C:/Users/Admin/Desktop/School/CIS 6/week10/hangman.py (3.9.1)
File Edit Format Run Options Window Help

import random
hangman_visual = ['''
+---+
|
|
==+, ''

+---+
O |
|
|
==+, ''

+---+
O |
| |
|
==+, ''

+---+
O |
|\ |
|
==+, ''

+---+
O |
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+---+
O |
/\ |
/
==+, ''

+---+
O |
/\ |
/ \
==+, ''

+---+
O |
/\ |
/ \
==+, ''

\_____/ RIP HANGMAN
| X   X |
| _     |
\_____/ , ...

\_____/ YOU SAVED HIM!
| ^ _   | NICE VOCABULARY!
| \___/ |
\_____/''']

#list of words to choose from
words = '''cabbage sheep brass rustic canvass tomatoes paper sweater stomach erase kitten flavor escape
crayon bread tiger groovy brother oranges pencil square potato elbow vacation aquatic''.split()

def gameBoard(missedLetters, correctLetters, secretWord): #function to display the board of the game
    print(hangman_visual[len(missedLetters)]) #prints hangman visual
    print('\nMissed letters:', end=' ')
    for letter in missedLetters: #prints missed letters seperated by spacea
        print(letter, end=' ')
    print()

    blanks = '_' * len(secretWord) #makes blank word the size of secret word
    for i in range(len(secretWord)):
        if secretWord[i] in correctLetters:
            blanks = blanks[:i] + secretWord[i] + blanks[i+1:] #replaces blanks with correct guesses

    for letter in blanks: #prints the secret word with spaces separating the underscores
        print(letter, end=' ')
    print()

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Ln: 124 Col: 3

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def checkGuess(oldGuess): #checks the guess to make sure it is a valid character
    while True:
        guess = input('Guess a letter: ')
        guess = guess.lower()
        if guess in oldGuess: #checks if guess have been done already
            print('You already guessed that letter.')
        elif len(guess) != 1: #checks if they enter more or less than 1 letter
            print('Please enter a single letter.')
        elif guess not in 'abcdefghijklmnopqrstuvwxyz': #checks if user entered a character other than a letter
            print('Please enter a letter.')
        else:
            return guess

def randoWord(wordList): #returns a random word from the list of words
    guessWord = random.randint(0, len(wordList) - 1)
    return wordList[guessWord]

print('Use your vocabulary skills and save Mr.Hangman from his doom') #added plot, lore enhances user experience
print('H A N G M A N')
gameEnd = False
missedLetters = ''
correctLetters = ''
secretWord = randoWord(words)

while True:
    gameBoard(missedLetters, correctLetters, secretWord) #display board
    guess = checkGuess(missedLetters + correctLetters) #gets new guess
    if guess in secretWord:
        correctLetters = correctLetters + guess #adds correct guesses to correct letters variable

        allLetters = True
        for i in range(len(secretWord)):
            if secretWord[i] not in correctLetters: #checks for win by seeing if every letter matches, return
                allLetters = False
                break
        if allLetters:
            print('You got it! The secret word was "' + secretWord + '"')
            print(hangman_visual[8]) #win screen
            gameEnd = True
    else:
        missedLetters = missedLetters + guess #adds missed guesses to missed letter variable

        if len(missedLetters) == len(hangman_visual) - 3: #displays loss if guesses exceeds number of guesses
            gameBoard(missedLetters, correctLetters, secretWord)
            print('Out of guesses!')
            print('The secret word was "', secretWord, '"')
            print('You had ' + str(len(missedLetters)) + ' missed guesses and ' + str(len(correctLetters)) + ' correct guesses')
            print(hangman_visual[7]) #loss screen
            gameEnd = True

if gameEnd: #asks if they want to play again if the game is finished
    replay = input('\nDo you want to play again? (y/n)\n')
    if replay.startswith('y'): #replays the game if user enters anything starting with 'y'
        print('H A N G M A N')
        gameEnd = False
        missedLetters = ''
        correctLetters = ''
        secretWord = randoWord(words)
    else:
        break

```

Shell (Start + Failed Guesses):

```
*IDLE Shell 3.9.1*
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===== RESTART: C:/Users/Admin/Desktop/School/CIS 6/week10/hangman.py =====
Use your vocabulary skills and save Mr.Hangman from his doom
H A N G M A N

+---+
|
|
|
===

Missed letters:
_ _ _ _ _
Guess a letter: a

+---+
|
|
|
===

Missed letters:
_ _ a _ _
Guess a letter: b

+---+
O |
|
|
|
===

Missed letters: b
_ _ a _ _
Guess a letter: c

+---+
O |
|
|
|
===

Missed letters: b
c _ a _ _
Guess a letter: b
You already guessed that letter.
Guess a letter: 7
Please enter a letter.
Guess a letter: abc
Please enter a single letter.
Guess a letter: |
```

Ln: 581 Col: 16

Win Screen + Replay:

```
*IDLE Shell 3.9.1*
File Edit Shell Debug Options Window Help

+---+
O |
|
|
+---+

Missed letters: b
c r a y _ _
Guess a letter: o

+---+
O |
|
|
+---+

Missed letters: b
c r a y o _
Guess a letter: n
You got it! The secret word was "crayon"!

  \_____/
 | ^ - |
 | \ / |
 |_____|
  YOU SAVED HIM!
  NICE VOCABULARY!

Do you want to play again? (y/n)
yes
H A N G M A N

+---+
|
|
|
+---+

Missed letters:
_ _ _ _ _
Guess a letter: |
```

Ln: 632 Col: 16

Loss Screen + No Replay:

```
IDLE Shell 3.9.1
File Edit Shell Debug Options Window Help

+---+
O |
/|\ |
| |
===

Missed letters: z x v q
Guess a letter: p

+---+
O |
/|\ |
/ |
===

Missed letters: z x v q p
Guess a letter: m

+---+
O |
/|\ |
/ \ |
===

Missed letters: z x v q p m
Out of guesses!
The secret word was " brass "
You had 6 missed guesses and 0 correct guesses

  /\      RIP HANGMAN
 | X  X  |
 |  _  |
  /\

Do you want to play again? (y/n)
n
>>> |
```

Ln: 704 Col: 4

Resources: <https://inventwithpython.com/invent4thed/chapter8.html>