



PRO-WORDLE REPORT

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Predicates: -

- ***choose_length(L, C)***: succeeds if the user enters a word in category C with length L.
- ***choose_category(CL, C)***: succeeds if the user enters a category C from the list CL.
- ***remove_duplicates(L, L1)***: succeeds if L1 is the list L after removing any duplicates.
- ***is_category(C)***: succeeds if C is an available category in the knowledge base.
- ***categories(L)***: succeeds if L is a list of all categories available in the knowledge base.
- ***correct_letters(L1, L2, L3)***: succeeds if L3 is a list containing the common letters between L1 and L2 in the order they were in L1.
- ***correct_positions(L1, L2, L3)***: succeeds if L3 is a list containing all the common letters in the same position in both L1 and L2.
- ***available_length(L)***: succeeds if there are words in the knowledge base with length L.
- ***available_length(L, C)***: succeeds if there are words in category C with length L.
- ***pick_word(W, L, C)***: succeeds if W is a word in the knowledge base which has length L and category C.
- ***game(L, G, W)***: succeeds if the users enters a word which matches with the word W, and has the same length L, and before the number of guesses left G reaches zero.

Brief description: -

The user feeds the knowledge base during the **build_kb** phase, then in the **play** phase, the **categories(C)** predicate is used and then the user chooses a category and a length using **choose_category(CL, C)** and **choose_length(L, C)** predicates respectively. A word is then picked using **pick_word(W, L, C)** and the predicate **game(L, G, W)** is called. In the **game(L, G, W)** predicate, the number of guesses left is decremented. The user is asked to enter a word which is compared by the word W using both **correct_letters(L1, L2, L3)** and **correct_positions(L1, L2, L3)**, then **game(L, G, W)** is recalled with the new number of guesses until it reaches zero.

Winning Scenario (1st run): -

1 ?- main.

Welcome to Pro-Wordle

Please enter a word and its category on separate lines:

|: doctor.

|: jobs.

Please enter a word and its category on separate lines:

|: engineer.

|: jobs.

Please enter a word and its category on separate lines:

|: horse.

|: animals.

Please enter a word and its category on separate lines:

|: banana.

|: fruits.

Please enter a word and its category on separate lines:

|: watermelon.

|: fruits.

Please enter a word and its category on separate lines:

|: done.

Done building the words database...

The available categories are: [animals,fruits,jobs]

Choose a category:

|: greetings.

This category does not exist

Choose a category:

|: fruits.

Choose a length:

|: 5.

There are no words of this length.

Choose a length:

|: 6.

Game started. You have 7 guesses.

Enter a word composed of 6 letters:

|: minion.

Correct Letters are: [n]

Correct letters in correct positions are: [n]

Remaining Guesses are 6

Enter a word composed of 6 letters:

|: maniac.

Correct Letters are: [a,n]

Correct letters in correct positions are: [a,n]

Remaining Guesses are 5

Enter a word composed of 6 letters:

|: mobile.

Correct Letters are: [b]

Correct letters in correct positions are: []

Remaining Guesses are 4

Enter a word composed of 6 letters:

|: arsenal.

Word is not composed of 6 letters. Try again.

Enter a word composed of 6 letters:

|: panada.

Correct Letters are: [a,n]

Correct letters in correct positions are: [a,n,a,a]

Remaining Guesses are 3

Enter a word composed of 6 letters:

|: banada.

Correct Letters are: [b,n,a]

Correct letters in correct positions are: [b,a,n,a,a]

Remaining Guesses are 2

Enter a word composed of 6 letters:

|: banana.

You Won!

true .

Losing Scenario (2nd run): -

2 ?- main.

Welcome to Pro-Wordle

Please enter a word and its category on separate lines:

|: done.

Done building the words database...

The available categories are: [animals,fruits,jobs]

Choose a category:

|: jobs.

Choose a length:

|: 5.

There are no words of this length.

Choose a length:

|: 6.

Game started. You have 7 guesses.

Enter a word composed of 6 letters:

|: donkey.

Correct Letters are: [d,o]

Correct letters in correct positions are: [d,o]

Remaining Guesses are 6

Enter a word composed of 6 letters:

|: teabag.

Correct Letters are: [t]

Correct letters in correct positions are: []

Remaining Guesses are 5

Enter a word composed of 6 letters:

|: romance.

Word is not composed of 6 letters. Try again.

Enter a word composed of 6 letters:

|: serial.

Correct Letters are: [r]

Correct letters in correct positions are: []

Remaining Guesses are 4

Enter a word composed of 6 letters:

|: trench.

Correct Letters are: [t,r,c]

Correct letters in correct positions are: []

Remaining Guesses are 3

Enter a word composed of 6 letters:

|: boiler.

Correct Letters are: [o,r]

Correct letters in correct positions are: [o,r]

Remaining Guesses are 2

Enter a word composed of 6 letters:

|: doober.

Correct Letters are: [d,o,r]

Correct letters in correct positions are: [d,o,r]

Remaining Guesses are 1

Enter a word composed of 6 letters:

|: donors.

Correct Letters are: [d,o,r]

Correct letters in correct positions are: [d,o]

Remaining Guesses are 0

You Lost!

true .