REPORT Project 1: Pro-Wordle
Team 86

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Project Description

- **build_kb :** responsible for building the KB.
- **is_category(C) :** succeeds if C is an available category in the KB.
- **categories(L):** succeeds if L is a list containing all the available categories without duplicates.
- **remove_duplicates(L1,L2):** succeeds if list L2 is L1 without duplicates.
- **available_length(L):** succeeds if there are words in the KB with length L.
- **available_length_category(L,C):** succeeds if there are words in the KB with length L from category C.
- **pick_word(W,L,C):** succeeds if W is a word in the KB with length L and category C.
- **random_word(W,L,C):** succeeds if W is a random word in the KB with length L and category C, and responsible for picking a word from the KB in the gameplay phase.
- **correct_letters(L1,L2,Cl):** succeeds if CL is a list containing the letters in both L1 and L2.
- **correct_positions(L1,L2,PL):** succeeds if PL is a list containing the letters that occur in both L1 and L2 in the same positions.
- **play:** responsible for the gameplay phase, containing :

- ○ **category_found(C):** recursive predicate that succeeds if the category entered is an available category in the KB.
- ○ **length_found(N,C):** recursive predicate that succeeds if the word length entered is an available word length of the selected category in the KB.
- ○ **word_found(X,L,C,N):** gives the player a maximum number of guesses equal to the entered length plus one. In each guess, the user must enter a word of the chosen length. The game then displays to the user the correctly entered letters (not necessarily in correct positions), the correctly entered letters in correct positions, and the remaining number of guesses. If the player enters a word of a different length, it displays ("Word is not composed of N letters. Try again."). If the player enters the right word, it displays ("You Won!"). If the player uses the maximum number of guesses, it displays (" You lost!").
- **main:** : the main predicate that will be queried to initiate the KB building phase then the game play phase.