

Computer Science AP

WordManager Class

The **WordManager** class has a job to do. It supplies words to the user, one at a time. These words come from a word bank inside the WordManager itself. When the user uses the method called *getWord()* the WordManager will randomly pick a word from its word bank and return it to the user. When all the words from the word bank have been used, the WordManager should re-cycle the used words back into the word bank and continue on.

The class already contains the following:

ArrayList called wordbank that contains a list of words that can be returned to the user.

ArrayList called usedwords that contains words that have already been returned to the user.

The method public String getWord(). This method should check to see if there are any words left in the wordbank list. If there are, getWord should pick a random word from the list. It should remove this word from the wordbank list, add the word to the usedwords list, and then return the word. If there are no words left in the wordbank, then the method recycle() should be called.

The method recycle should take all the words in the usedword list and add them back into the wordbank, then clear out the usedword list.

To test this out, a runner program called **WordManagerTester** has been created. It will ask your word Manager to provide a word several times. Currently it will always print out "computer" but once you complete the WordManager class it will print out words from the WordManager's word bank.

Notice that all words in the wordbank must be used at least once before the user ever gets that word again. That is the point of the usedword list and the recycle method!

Remember that you are only coding the WordManager class methods getWord and recycle. Refer to the list of methods that you can use with the ArrayList class (add, get, set, remove, clear, etc.). Code and test until it works!

Good luck coding WordManager.