

(3 points) 1. Why do the adjectives and nouns files contain the total number of words on the first line? What would happen if we tried to load a file that does not contain this number? What would need to change in the code to avoid this problem?

By specifying the number of lines we can allocate the required memory for the String Array. If we do not know the number of lines we cannot allocate the needed memory for the String Array. A way around this if we don't know the number of lines is to use a dynamic array such as ArrayList, that will allow us to not know the size of the array, and have it adapt as we add strings to it.

(2 points) 2. As you may have noticed, it is quite easy to generate a band name that can be considered inappropriate. Since you would like to tell your grandparents about your band too, you prefer an appropriate name. How would you go about making sure that the generated name is appropriate? What are some of the challenges that come with doing so?

A text file containing a list of all inappropriate words could be used to filter out any that we do not want. When we encounter the word while generating the name, we can use a loop to keep generating band names until we have one that does not contain any of the words in the inappropriate words text file. The main challenge with doing this is that we are limited to the words that are in the text file, and there is a chance we may miss a word then we intended to add. Another challenge is creating the list could be time consuming as there are many words we would like to negate.