7 Reasons This Assignment Will Be More Interesting Than Your English Class (#3 Will Surprise You!)

Our main goal at Clix.com is to get people to look at our advertisements; however, coming up with interesting, creative, and original content is too hard. Luckily, you have been hired to write a computer program to generate “clickbait” headlines for our website!

# Clickbait Headline Generator

You are tasked with creating a software application that will generate a variety of clickbait headlines in different styles. Some of these headline styles that are popular include:

* You Won’t Believe…
* # Reasons Why…
* What You Don’t Know About…
* “Random Group” Hate Him/Her/Them…
* What X Don’t Want You To Know…
* Gift Ideas For…
* and many, many more (just check out YouTube, Facebook, Instagram, or other platform that have headlines or titles for their content)

Your software should ask the user how many headlines they would like to generate, then generate that many random headlines. The program should operate like a Mad Lib, where the “bones” of each headline type are the same, and values are inserted at random to get the different headlines.

## Sample Output

HEADLINE GENERATOR

=====================================================================

Here at Clix.com, we are all about getting people to look at our ads!

Enter the number of clickbait headlines to generate: 5

=====================================================================

HEADLINES

=====================================================================

1. Big Companies Hate Her! See How This Toronto Cat Invented a   
Cheaper Plastic Straw

2. What Telephone Psychics Don’t Want You To Know About Celery

3. 14 Reasons Why Chickens Are More Interesting Than You Think   
(Number 2 Will Surprise You!)

4. Are Millennials Killing The Keto Diet Industry?

5. This Florida Athlete Didn’t Think Clowns Would Take Her Job. She   
Was Wrong.

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...

Headlines printed to "headlines.txt" was successful.

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Would you like to generate more headlines? Yes or No: No

=====================================================================

Goodbye.

## Program Specifications

Your program **must contain** the following elements of code and/or information to be considered complete:

* Your program will require several arrays. These arrays will be used when choosing random words to insert in the headlines. Arrays should be ***global variables*** for the software. Here are some examples of arrays you can use for helping to generate your headlines:
  + OBJECT\_PRONOUNS {"Her", "Him", "Them", "It"}
  + PERSONAL\_PRONOUNS = {"She", "He", "They"}
  + NOUNS = {"Athlete", "Dog", "Cat", "Clown", "Broom", …}
  + PLACES = {"Toronto", "London", "New York", "Florida", "Tokyo", …}
  + WHEN = {"Soon", "Next Year", "This Year", "RIGHT NOW", …}
  + WHERE ={"House", "Attic", "Bank Deposit Box", "School", …}
* **For each type of headline you generate, you will need a different method**. For example, one method might generate a random “You won’t believe…” headline. To get a “# Reasons” headline, however, you’ll need to use a different method.
* **The type of headlines should be chosen at random**. For example, if you have 5 methods to generate 5 different types of headlines, then each headline generated could be determined using a random number between 1 and 5.
* Headline methods should work by having a stock template, then choosing appropriate words, randomly, to fill in the template. The random words are chosen from the appropriate word arrays (see point above).
* **ALL generated headlines are printed to file**. This can be a plain text file or a data file.

Other things to consider when developing your software:

* Make sure it is user friendly and does not crash unexpectedly (error handling)
* All code should be readable and contain the appropriate documentation (commenting, etc.)

***IF you would like to incorporate any concepts that extend BEYOND what we’ve covered in class, please speak with me FIRST for approval. You will need to explain i) what you want to include, ii) how it works, and iii) why it will improve your program.***

## Submission

A complete submission will include a copy of your source code file(s) so I can run your software.

# Evaluation

Your assignment will be marked using the following rubric:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Expectation** | **Level 1** | **Level 2** | **Level 3** | **Level 4** | **Level 4+** |
| A1. Demonstrate the ability to use different data types and expressions when creating computer programs | Data and information are used and manipulated correctly rarely. | Data and information are used and manipulated correctly some of the time. | Data and information are used and manipulated correctly most of the time. | Data and information are used and manipulated correctly all of the time. | Data and information are used and manipulated correctly and efficiently all of the time. |
| A2. Describe and use modular programming concepts and principles in the creation of computer programs | Program contains some methods.  The program somewhat works as expected. | Program contains most of the required methods.  The program mostly works as expected. | Program contains all required methods but no others.  The program works as expected. | Program contains all required methods and incorporates modularity.  The program exceeds expectations. | Program contains all required methods and incorporates modularity in a thoughtful and efficient way.  The program exceeds expectations. |
| A3. Design and write algorithms and subprograms to solve a variety of problems | Attempts to write data to file are incomplete or incorrect. | Attempts to write data to an appropriate file format but may experience IOException. | Writes data to an appropriate file format. | Accurately writes data to an appropriate file format. | Accurately and efficiently writes data to an appropriate file format in a well-organized way. |
| A4. Use proper code maintenance techniques when creating computer programs | The code lacks organization and/or documentation. | The code has some organization and documentation. | The code is mostly organized and documented. | The code is organized and completely documented. | The code is organized, completely documented, and user-friendly. |