

CS 171 - Programming Assignment 4

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1 Overview

The goal of this assignment is to create a version of game Mad Libs©. Given a text file with the story, the program will ask the user to fill in the blanks. The program will then show the user the final story.

As part of this project, you will be required write your own story.

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2 Word Template Games

Mad Libs©are a type of word template game. A story is written with multiple blank spaces. The game has two players. One player asks the other for words to fill in the blanks. The player suggesting words does not know what the story is or what the words are for. Once all the blanks have been filled in, the story

is read. Since the person suggesting the words does not know the context, this will lead to a funny but nonsensical story.

An example of a real Mad Lib game is provided at the end of the instructions.

The text files we are using are based on <http://www.madlibs.com/printables/> and <http://www.woojr.com/winter-mad-libs/>.

3 Programming Project

You will develop a python program `sanelib.py` that reads from a text file and fills in the blanks for a story.

The first thing the program needs to do it ask for the text file containing the story. The program will then read the file.

While the file is being read, the program will encounter words that start with a square bracket [. A word that starts with a square bracket is a blank. It needs to be filled in by the user. Between the [and] in the string is what type of word to ask the user for.

For example, if the program encounters (verb-ending-in-ing) then it should ask "Please give a verb ending in ing". The input from the user is then read to fill in the blank.

Once the entire store is complete, it will be printed out for the user.

The following additional guidelines must be followed:

- Only print the story once all blanks have been filled in.
- If the type of word being asked for starts with a vowel ask "Please give an ..."
- If the type of word being asked for does not start with a vowel as "Please give a ..."
- Users may give multiple word answers.
- Your program should not crash if the file cannot be read. It should exit gracefully.
- The blank space may have punctuation, be sure this is correctly printed in the story.
- Your program must work with the three example files provided.

If the file does not exist print an error and exit with `sys.exit(0)`

Welcome to a fun word replacement game.

Enter the name of the file to use:

`fake_file.txt`

Error Bad File Name

4 Custom Story

Create one story of your own. Name the file based on your short drexel email address. For example, `mw b33.txt`. The story must have at least 9 words that are replaced. It must also have at least 5 sentences. The story should also make some sense when reasonable words are given.

5 Example Execution Trace

You are not required to exactly match the below layout, but your content and results must be the same.

The below execution traces do not test all possible files. One example is given. You are expected to do additional testing on your own.

5.1 Example 1

```
Welcome to a fun word replacement game.
Enter the name of the file to use:
example1.txt
Please give a name
Mark
Please give a place
Drexel
Please give a day of the week
Friday
Please give a time
noon
Please give a verb
eat
Please give an animal
raccoon
Please give a body part
mouth
Here is your story:


---


Mark is having a party! It's going to be at Drexel
on Friday. Please make sure to show up at noon,
or else you will be required to eat a/an raccoon
with your mouth.
```

5.2 Example 2

```
Welcome to a fun word replacement game.
Enter the name of the file to use:
mad_lib.txt
```

Please give an adjective
 cold
 Please give an adjective
 loser
 Please give a noun
 mountain
 Please give a noun
 moon
 Please give a plural noun
 cats
 Please give a game
 super mario 3
 Please give a plural noun
 men
 Please give a verb ending in ing
 reading
 Please give a verb ending in ing
 killing
 Please give a plural noun
 goats
 Please give a verb ending in ing
 knitting
 Please give a noun
 swamp
 Please give a plant
 spider plant
 Please give a part of the body
 leg
 Please give a place
 Texas
 Please give a verb ending in ing
 programming
 Please give an adjective
 excited
 Please give a number
 17
 Please give a plural noun
 sandwiches
 Here is your story:

A vacation is when you take a trip to some cold place
 with your loser family. Usually you go to some place
 that is near a/an mountain or up on a/an moon. A good
 vacation place is one where you can ride cats or play
 super mario 3 or go hunting for men. I like to spend
 my time reading or killing. When parent go on a vacation ,

they spend their time eating three goats a day, and fathers play golf, and mothers sit around knitting. Last summer, my little brother fell in a/an swamp and got poison spider plant all over his leg. My family is going to go to (the) Texas, and I will practice programming. Parents need vacations more than kids because parents are always very excited and because they have to work 17 hours every day all year making enough sandwiches to pay for the vacation.

6 Grading

There are no strict guidelines for how to write your code or develop your user interface. You will be graded on the quality of your design and execution.

- Prints Final Story: 15 points
- A vs AN used correctly: 15 points
- Allows Multiple Words as Input: 15 points
- Works with all Three Examples: 15 points (5pts each)
- Reads File
 - Opens File: 3 points
 - Handles Bad File names: 3 points
 - Reads File: 4 points
- Output is well formatted and easy to read: 3 points
- File name is correct: 1 point
- Name in comments: 1 point
- Lab Section in comments: 1 point
- Code is well commented: 3 points
- Custom Story
 - At Least 7 Sentences: 7 points
 - At Least 9 Words: 9 points
 - Correct File Name: 1 points
 - Makes Sense: 4 points

If your code has any runtime errors, a 50% deduction will be taken. Only portions of the code that execute without errors will be graded.

7 Resources

<http://www.madlibs.com>

<http://www.woojr.com/winter-mad-libs/>

8 Example Mad Lib



MAD LIBS®
VACATIONS

A vacation is when you take a trip to some _____ place
ADJECTIVE
with your _____ family. Usually you go to some place
ADJECTIVE
that is near a/an _____ or up on a/an _____.
NOUN NOUN
A good vacation place is one where you can ride _____
PLURAL NOUN
or play _____ or go hunting for _____. I like
GAME PLURAL NOUN
to spend my time _____ or _____.
VERB ENDING IN "ING" VERB ENDING IN "ING"
When parents go on a vacation, they spend their time eating
three _____ a day, and fathers play golf, and mothers
PLURAL NOUN
sit around _____. Last summer, my little brother
VERB ENDING IN "ING"
fell in a/an _____ and got poison _____ all
NOUN PLANT
over his _____. My family is going to go to (the)
PART OF THE BODY
_____, and I will practice _____. Parents
A PLACE VERB ENDING IN "ING"
need vacations more than kids because parents are always very
_____ and because they have to work _____.
ADJECTIVE NUMBER
hours every day all year making enough _____ to pay
PLURAL NOUN
for the vacation.