Computer Science Department San Francisco State University CSC 340 Spring 2016

Assignment 1 - Simple File I/O

Due Date

Wednesday, February 17, at midnight.

Overview

The purpose of this project is to create a simple user interface for interacting with a program. The program will provide a basic menu that will allow the user to input a number to execute some specific actions, each of which you will implement.

Submission

See the submission guidelines posted on iLearn. Remember that your submission should not include any binaries or other generated files!

Requirements

- Create a simple program that initially displays a menu of actions the user can take by entering an integer corresponding to the action (see output, below). The actions should include the following:
 - 1.1. Display the contents of a file
 - 1.2. Append formatted text to a file
 - 1.3. Exit
- 2. The program should continue to execute until the Exit option is selected.
- 3. The "Display the contents of a file" action should prompt the user for two integers, month and year, and display the contents of a file named in the format: "year_month" in the current directory.
- 4. The "Append formatted text to a file" action should determine the file to append to by prompting the user for two integers, month and year, and opening the file named in the format "year_month" for appending. This action should then prompt the user for a string (that does not contain white space) and a double, and write those on one line to the end of the file, formatted to two decimal places.
- 5. Do not change the order of arguments supplied, nor the filenames specified here! They were specified in this order intentionally!!
- 6. Do not change the output! It must appear exactly as you see it in Appendix B, including whitespace (new lines after "failed to open message", and spaces in between prompt and user input, for example)!

Appendix A: Resources

The makefile can be found at https://gist.github.com/jrob8577/0cb740b27c3c01ced4f9.

Appendix B: Sample Output

User input is italicized, in bold.

▷ ./driver

SELECT AN OPTION:

- 1. Read from File
- 2. Write to a File
- 0. EXIT

Enter selection: 1

Enter month then year: 3 2015 File 2015_3 failed to open.

SELECT AN OPTION:

- 1. Read from File
- 2. Write to a File
- 0. EXIT

Enter selection: 2

Enter month then year: 3 2015

Enter a category and a value: category_one 123.456

SELECT AN OPTION:

- 1. Read from File
- 2. Write to a File
- 0. EXIT

Enter selection: 2

Enter month then year: 3 2015

Enter a category and a value: categoryTwo 42.10

SELECT AN OPTION:

- 1. Read from File
- 2. Write to a File
- 0. EXIT

Enter selection: 1

Enter month then year: 3 2015
----- FILE 2015_3 BEGIN -----

category_one 123.46

categoryTwo 42.10

----- FILE 2015_3 END -----

SELECT AN OPTION:

- 1. Read from File
- 2. Write to a File
- 0. EXIT

Enter selection: 0