Project 2.1.6 Consumer Review Lab

Lab

Activity 1

Positive	Negative
Impeccable Welcoming Comfortable Great Helpful	Worst Bad Rude Unfriendly Noisy

1.
    a. sentimentVal(String word)
    b. Yes, it requires a string as a parameter. If you try to pass a different value (such as an int) it will result in a syntax error.
    c. Yes, it returns a double value.
2.

sentimentVal(“great”)	1.48
sentimentVal(“rude”)	-0.42
sentimentVal(“helpful”)	1.71

3.
    a. Yes, because the input is a string and the output is being assigned to a double variable.
    b. No, because the input is a double value and not a string.
    c. No, because the sentimentVal method only takes one argument, not two.

Activity 2

4. The totalSentiment method uses substring and indexOf to isolate a word from the review. Then, it uses the getSentiment method on that word and adds the sentiment to the total. It removes the word from the string and repeats until there are no more words left in the string. At the end, it rounds the sentiment value to the nearest hundredth and returns it.

5.

    a. The ratings don't make much sense. Pasting in a super positive review will sometimes give a medium rating and sometimes a very low rating.
    b. The amount of sentiment given to positive words could be boosted, so that they have a higher effect on the review. Words with sentiment values very close to zero could be ignored, or rounded to a whole number.
6. The student's code checks if the totalSentiment value is LESS THAN 15, instead of greater than. This means that it will always either return 4 if the value is less than 15 or 0 if it is greater than 15. This can be fixed by changing the signs on the if statements to be greater than instead of less than.

Activity 3

3. The indexOf method can be used to search for a character in a string. Once the character is found, the substring method can be used to get the word after the character and remove the word from the string. The reason that 1 needs to be added to the position is that it prevents the program from putting an extra space at the beginning of the string.
5. Non-static methods are called on an instantiated object of a class. Static methods can be called directly from the class without the need to instantiate an object.
6. The fakeReview method could take an argument for positive/negative and choose adjectives based on that input.

Activity 4

1. To leave for a business you don't like so that their rating decreases.
2. To leave for your business so that your rating increases.
3. The existing fakeReview method replaces the placeholder word with a random word from the positiveAdjectives or negativeAdjectives document. To make the review stronger, the sentiment value of words can be checked, and a new word can be chosen if the sentiment value is not high or low enough.
5. This block of code will remove the first character from the oneWord string.
6. The adjectives document did not contain asterisks, so if the asterisk were to be put into the sentimentVal method along with the word, it would always return zero.
7. This method could be modified to have an even higher value than it is currently set to (for example, 2 instead of 1). This would create much more positive reviews.

Project

My program will have the user think of a letter, and then input words that contain the letter. The program will try to guess the letter that the user is thinking of.

Checklist

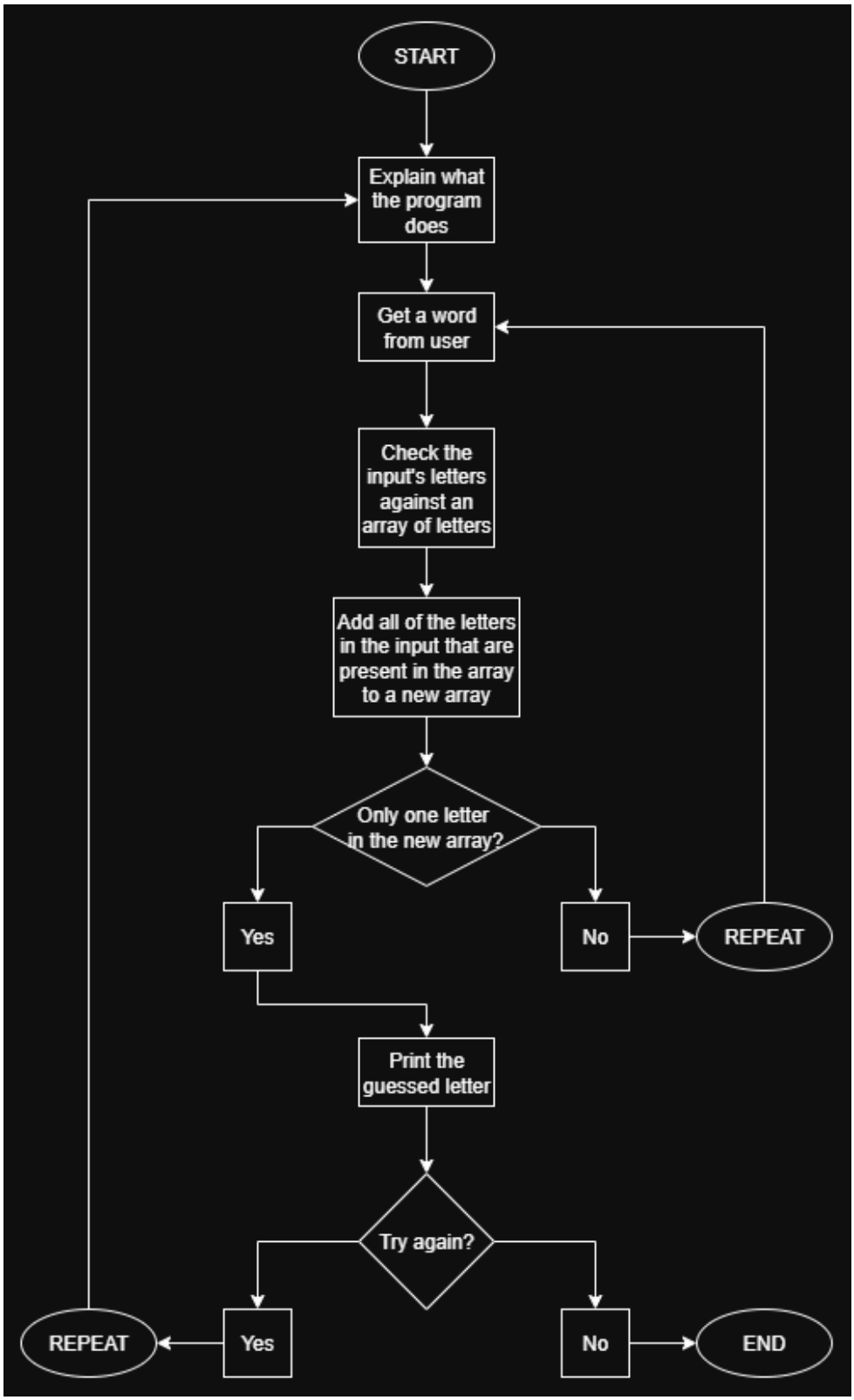
- ☑ ~~Main method~~
- ☑ ~~At least one other method with at least one parameter~~
- ☑ ~~At least two methods from the String class~~
- ☑ ~~Conditional statements and compound booleans~~
- ☑ ~~Iteration~~

Plan

Project Milestone Chart		
Milestones	Estimated Time to Develop	Actual Time to Develop
Get input from user	5 min	5 min
Create a letters array	5 min	5 min
Check word against array	10 min	7 min
Update array and loop	10 min	5 min
Return and print guessed letter	5 min	5 min

Design

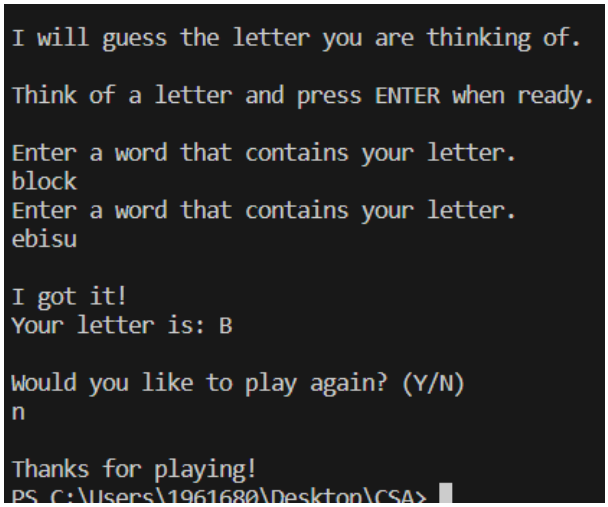
View the design file here: 2.1.6 flowchart.drawio

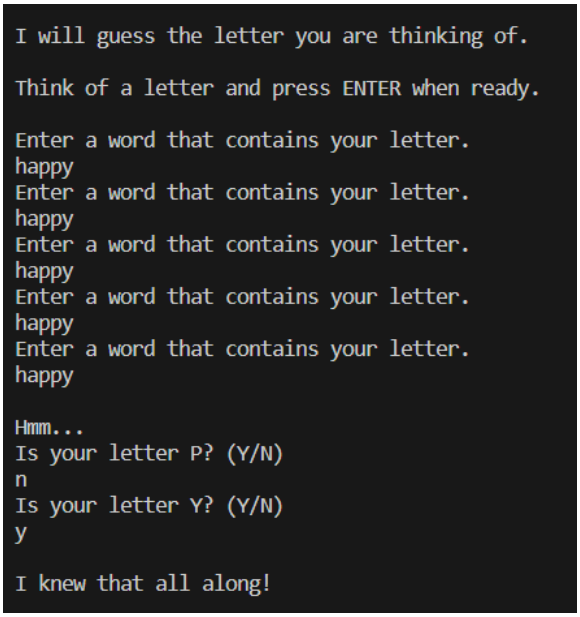


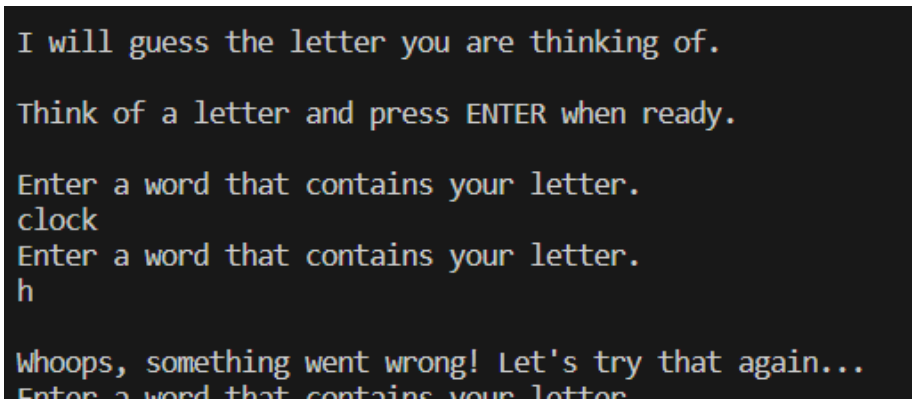
Create

View the program file here: LetterGuesser.java

Output Examples:







Reflect

My program has more features than expected, meets all of the requirements for the project, and was completed a bit slower than expected because of the extra features that were added.