SWE437 Assignment 3
Maintenance Work

Christy Kim
Wu Zi

https://github.com/christyskim/Quote_Wu_Kim_Assignment3

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Please enter quote:

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Add quote, Random quote, Search or Exit?(type A, R, S, or E): a
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1. testing quote

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Add quote, Random quote, Search or Exit?(type A, R, S, or E):
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<u>Data integrity checks</u>

We limit new quote to have at most 300 characters and the author name for the new quote to at most 100 characters. We print out an error statement when the length of quote or author name exceeds the limit. We print out an error statement when the user input is empty. We print out an error statement when the user input starts with a whitespace or new line character '\n'. Finally, we check if the quote already exists every time the user tries to add a new quote, and the program will print out error statement if the quote already exists and new quote will not be added.

<u>Summary of Data Integrity Checks:</u>

- Limit new quotes to have maximum 300 characters
- Limit author names to have maximum 100 characters
- Prohibit empty input
- Prohibit inputs that start with a whitespace or new line character '\n'
- Check for duplicate quote, if found, new quote will not be added

Document Log

- Added a functionality in main.java to ask for a new quote and the author when adding a new quote.
- New quote is added to QuoteList q instead of quotes.xml file.
- Modified box() function in main.java to print out the new option "A".
- Created new file called AddXMLQuote.java
- Added new function called addQuoteToXML in AddXMLQuote.java that takes in two String inputs, author and quote.
- Fixed an error in main.java when searching for a quote using a part of author's name.
- ValidInput function is added to main.java that checks for data integrity
- Modified case 'A/a' in userChoice of main.java to incorporate verification of user's input using ValidInput().
- Modified case 'A/a' in userChoice of main.java to prevent adding preexisting quote into XML file.

Maintainability Assessment

What did the original programmers do that made it hard to change the software?

There were no functionality in the original code that can be used to add a new quote.

Comments were missing in some of the original files.

Programmers who were changing the software had no prior knowledge of XML.

What did the original programmers do that made it easy to change the software?

XML file was given by the original programmer that made it easy to understand the tags within the XML file.

Since we had the interface setup, we only had to add one more functionality for the interface. Coming up with the whole interface from scratch would have been harder than just adding one functionality onto the interface.

Since we were given a set of quotes, it was easier to determine what kind of quotes to accept.

What would you do differently if you did it again?

We could improve more on enforcing the data integrity of new quotes.

We can figure out a way to check if new quote is a valid quote by linking the software to an online search engine which will require more advanced skills.