

Group Members:

Zi Wu

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Kind of interface:

CL

Location of Source files:

[https://github.com/christyskim/Quote\\_Wu\\_Kim](https://github.com/christyskim/Quote_Wu_Kim)

[illegible]

- (4 pts) Whether each item is included
- (3 pts) Whether the modified software works
- (4 pts) Clarity and thoughtfulness of the documentation log
- (4 pts) Clarity and thoughtfulness of the maintainability assessment
- (3 pts) Quality and maintainability of the changes you made to the code (this is why we need access to source files)
- (2 pts) Other factors to be determined while grading

#### Documentation log

- We added a main class which allows us to run the program in Eclipse and command line.
- In the main class, we created three functions:
  - **InitList()**- this is where we initialize list and create quotes
  - **userChoice()**- this function asks users to choose if they want to get a random quote or search for a quote
  - **box()**- this helper function creates a box that contains the program operation menu which tells users how to use the program
  - **recentSearch(String search)** - this helper function prints out a list of recent searches by the user.
- We developed our own interface which allows users to decide if they want to get a random quote or search for a specific quote.
- We raised exceptions for cases such as quote not found or author not found.
- We made no changes in the code that was originally given.

#### Maintainability of the software

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

The original programmers did not comment the code thoroughly that made it hard to understand the purpose of each java files. This especially applied to QuoteSaxHandler and QuoteSaxParser files.

There were many functionality that are not necessary to generate an interface. Unused codes made it harder to change the software since we had to figure out what are needed and what are not needed. We ended up not using most of the code present in QuoteSaxHandler and QuoteSaxParser. If we had better knowledge of XML file and SAX handler, it would have been easier to change the software. Complexity of the code played a major role in making it harder to change the software. In addition, ability of the programmer also played a role as a determining factor for easiness of modifying the software.

The constants in QuoteList also made it harder to utilize some of methods in the QuoteList. We ended up writing out a separate lines of code within main.java to search for a quote. Also, some of methods needed to implement a feature of the software were missing.

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

Simplicity of methods for Quote.java and QuoteList.java made it easy to change the software. Also Quote and QuoteList files were commented that helped improve the readability of the software.

Quote and QuoteList provided many variety of helper methods which helped with changing the software. Using those helper methods, we only had to figure out a way to make an interface for the user where user can search for quotes and get a random quote.

Although we did not fully understand how to use XML files, function names allowed us to determine which methods can be used to parse quotes saved in quotes.xml file.

What would you do differently if you did it again?

We can figure out how to use the search method in QuoteList.

After fully understanding XML files, we can utilize the SAX handler and parser much more in order to increase usability of the software