

Change request log

1. Team

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2. Change Request

Change request #1. We were requested to modify the status bar right at the bottom of jEdit. We were asked to add a section that would count the number of words past the caret over the number of words in the file.

3. Concept Location

Step #	Description	Rationale
1	<i>We looked for the StatusBar class.</i>	<i>We were told by the change request that the change would be in the status bar.</i>
2	<i>We tried to look for the caret information display in the code.</i>	<i>The change would be in the caret information display, so we needed to understand it before making any changes.</i>
3	<i>We analyzed the updateCaretStatus() function.</i>	<i>We analyzed it to understand how we would make the change there.</i>
4	<i>Checked the remainder of the class.</i>	<i>We made sure that there wasn't anywhere else we would make the change.</i>

Time spent (in minutes): 25

4. Impact Analysis

Use the table below to describe each step you follow when performing impact analysis for this change request. Include as many details as possible, including why classes are visited or why they are discarded from the estimated impact set.

Do not take the impact analysis of your changes lightly. Remember that any small change in the code could lead to large changes in the behavior of the system. Follow the impact analysis process covered in the class. Describe in details how you followed this process in the change request log. Provide details on how and why you finished the impact analysis process.

Step #	Description	Rationale
1	<i>We checked if updateCaretStatus was called anywhere.</i>	<i>To reduce the errors if we make any.</i>
2	<i>We found out that propertiesChanged() called updateCaretStatus.</i>	<i>propertiesChanged() called updateCaretStatus() to make the changes. This call is necessary to make the changes.</i>
3	<i>We included several variables and statements.</i>	<i>These changes are identified within updateCaretStatus() and do not interfere with any other functions apart from propertiesChanged() which is the calling function.</i>

Time spent (in minutes): 35

5. Actualization

Step #	Description	Rationale
1	<i>We changed the display of the caret information display.</i>	<i>We did this to show the words at the caret marker alongside the amount of all words in the file.</i>
2	<i>We identified <code>updateCaretStatus()</code> and created a set of int variables and string arrays.</i>	<i>We created a string array that would hold the words at the caret mark. The int variables hold the number of words.</i>
3	<i>We established a while loop.</i>	<i>The while loop ran and added the words if there were words in the text area. The string array will contain all the words and then input them into word count. The words are identified if there is a whitespace or a newline.</i>
4	<i>We created a method called <code>getClickedWord</code></i>	<i>The method looked through the text area and returns the word at the caret position.</i>
5	<i>We created a string variable and a for loop.</i>	<i>The string variable looked for the word at position of the caret and the for loop searched for the index value at which that word appeared in the words string array.</i>
6	<i>We wrote down the information in the display</i>	<i>We wrote down the display to be 'indexofWordAtCaret/WordCount'</i>

Time spent (in minutes): 85

6. Validation

Use the table below to describe any validation activity (e.g., testing, code inspections, etc.) you performed for this change request. Include the description of each test case, the result (pass/fail) and its rationale.

Step #	Description	Rationale
1	<i>Test case defined:</i> <i>Input – The quick brown fox jumps over a lazy dog</i> <i>Expected output – 1,16 (15/40) (3/9)</i>	<i>The test was inconclusive because jEdit kept freezing every time which rendered us unable to complete testing.</i>

Time spent (in minutes): 20

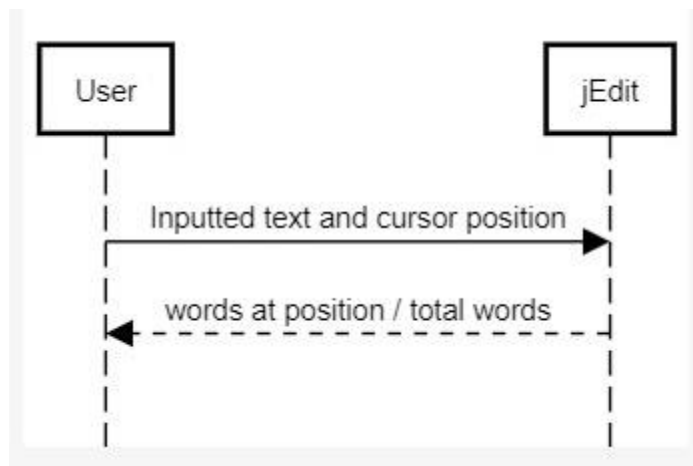
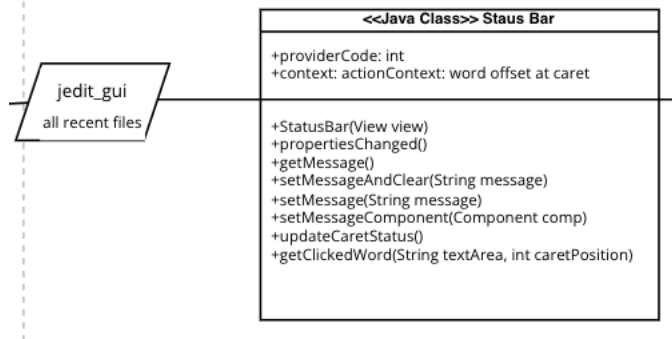
We continued to test it but jEdit froze every single time.

7. Timing

Summarize the time spent on each phase.

Phase Name	Time (in minutes)
Concept location	25
Impact Analysis	35
Actualization	85
Verification	20
Total	165

8. Reverse engineering



9. Conclusions

Classes and methods changed:

- *org/gjt/sp/jedit/StatusBar.java/updateCaretStatus()*
 - We modified the *updateCaretStatus* to show the word offset and total words.
- *org/gjt/sp/jedit/StatusBar.java/getClickedWord(p:String, int)* // This method was added to help complete the change.