Change request log

1 Team

BugHunters
Members:
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Sadaf Ghaffari
Bibek Raj Shrestha

2 Change Request

Jedit Change Request-3 : Currently, jEdit displays the horizontal and vertical scroll bars (see Figure 3) whenever the content of the opened document exceeds the size of the editor. Implement an option in the View menu that allows to hide the scrollbars.

3 Concept Location

The following is the detail on a concept location process for the change request "Enable/Disable scroll bars":

Step #	Description	Rationale
1	*We ran the system*	
2	*We searched for the keyword "Line Scroll" to find the usage.*	*Because the "Line Scroll Up" is present in the same section under scrolling where we need to add enable/disable scroll. So we thought it would have similar functionality.*
3	*From 20 files, almost all of them were properties files for different language support. So we selected one for english jedit_en.prop*	
4	*We found out the name used in the above file "scroll-up-line" was used as the label so we started to search for this word. We again found out several files but we filtered through it we found two files that made more sense textarea-actions.xml and actions.xml*	*We noticed that there was a method that gets called when the item is selected. So we thought we need to add the method for Enable and Disable status bar.*
5	*We than search for "scrollUpLine" to find its usage.*	*Because it was the method which was invoked when this item was selected. This gave us the information about the class that needs to be changed*
6	*We marked the class TextArea, actions.xml, jedit_en.prop, jedit_gui.props as "located".*	*We confirmed this class and files had to be modified.*

Time spent (in minutes): 40

4 Impact Analysis

The following table summarizes the impact analysis we did for this change request.

Step #	Description	Rationale
1	*Since we are trying to define some new methods, we need to add it to above mentioned files. However, these files were used in displaying different menu items in GUI.*	*To track the classes that could be impacted by the change.*
2	*We inspected the class TextArea, and other files actions.xml, jedit_en.prop and jedit_gui.props. We marked it as "to change".*	*We realized this class and other files need to be changed to add the item in the menu. These files has to be changed because we need to implement the method that would help to display Enable/Disable submenu under scrolling and add the functionality for those options.*
3	*The file textarea_actions.xml was discarded from the list of change.*	*There was not considerable evidence to reject it so we made the changes to the file but it did not appear on the GUI. Therefore, we rejected this file as not necessary.*

Time spent (in minutes): 15

5 Actualization

The table below summarizes the actualization we performed to implement this change.

Step #	Description	Rationale
1	*In order to implement the GUI, we have to add some changes to jedit_gui.props so that it can link the action and the GUI functionality. We also need to change the jedit_en.prop, as the text added to this file is used to display in the GUI mode. Also action.xml need to be updated where we add the few line to add in the action to be performed when the item is selected.*	*Based on the implementation of other item in the sub-menu, we tried to implement similar changes for this feature. We have to add few line to add in the functionality.*
2	*The TextArea was also changed to add two function disableScroll() and enableScroll(). These methods are called when the item Enable/Disable is selected from the sub-menu.*	*We have to implement the feature and define what we have to do when the sub-menu is selected from the scrolling menu.*
3	*We compiled the program and try to verify it with different inputs manually in the field.*	*To make sure everything works.*

Time spent (in minutes): 30

6 Validation

The table below summarizes the validation phase of the change request.

Step #	Description	Rationale
1	*Test case defined:* *Inputs: GUI (manual verification)* *Expected output: Item "Enable Scroll" and "Disable Scroll" present under scrolling menu.*	*We check the GUI and checked if the item add is present for user to select.* *The test passed.*
2	*Test case defined:* *Inputs: GUI (manual verification)- selected "Disable Scroll"* *Expected output: The scroll bar disappears.*	*The test passed.*
3	*Test Case defined:* *Inputs: GUI (manual verification) – selected "Enable Scroll"* *Expected output: The scroll bar appears.*	*The test passed.*

Time spent (in minutes): 10

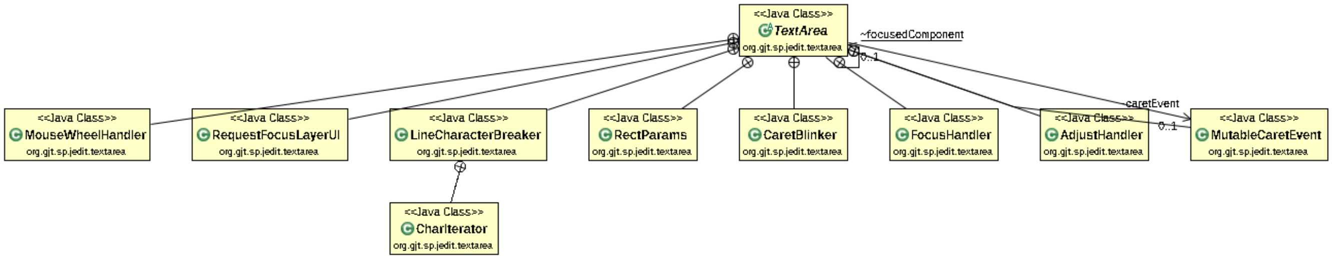
7 Timing

Summarize the time spent on each phase.

Phase Name	Time (in minutes)
Concept location	40
Impact Analysis	15
Prefactoring	-
Actualization	30
Postfactoring	-
Verification	10
Total	95

8 Reverse engineering

UML diagram of the class that were visited “TextArea”. Other files are properties and xml files.



9 Conclusions

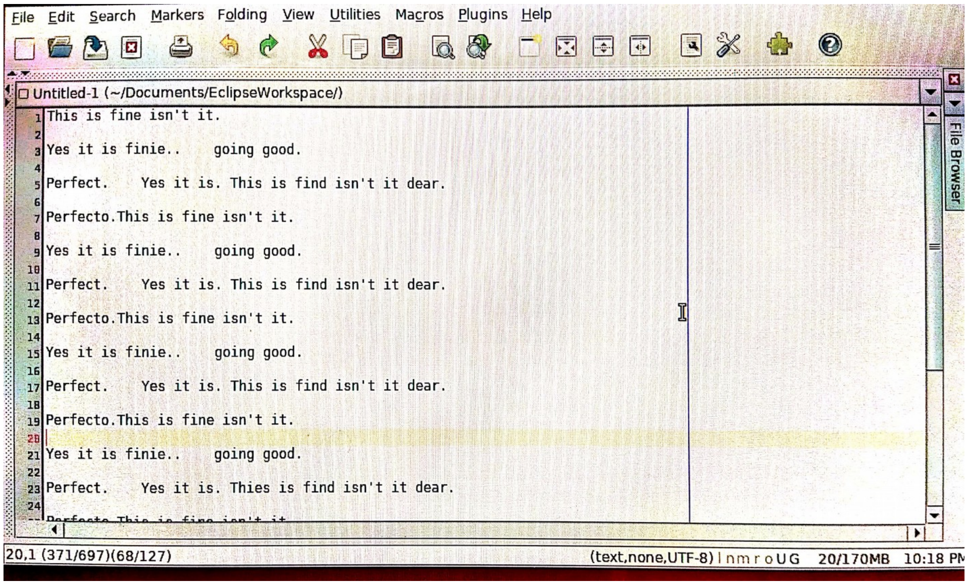
The change was implemented by replicating the functionality of other options already present in the module. Based on the analysis and the nature of change we assured that the change does not have any influence other modules. We also verified that the change does not effect other functionality.

Classes and methods changed:

- *org/gjt/sp/jedit/jedit_gui.props*
- *org/gjt/sp/jedit/textarea/TextArea.java*
  - *void disableScroll()*
  - *void enableScroll()*
- *org/jedit/localization/jedit_en.props*
- *out/production/jedit-5-5-0/org/gjt/sp/jedit/actions.xml*

GitHub Repository: https://github.com/prashantkthakur/cs515-s19-a2-BugHunters-jedit550

Some screenshots from the execution.


File Edit Search Markers Folding View Utilities Macros Plugins Help
Untitled-1 (~/Documents/EclipseWorkspace/)
File Browser
20,1 (371/697)(68/127)
(text,none,UTF-8) I n m r o U G 20/170MB 10:18 PM

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This is fine isn't it.

Yes it is finie..    going good.

Perfect.    Yes it is. This is find isn't it dear.

Perfecto.This is fine isn't it.

Yes it is finie..    going good.

Perfect.    Yes it is. This is find isn't it dear.

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Figure: GUI showing scroll bar.

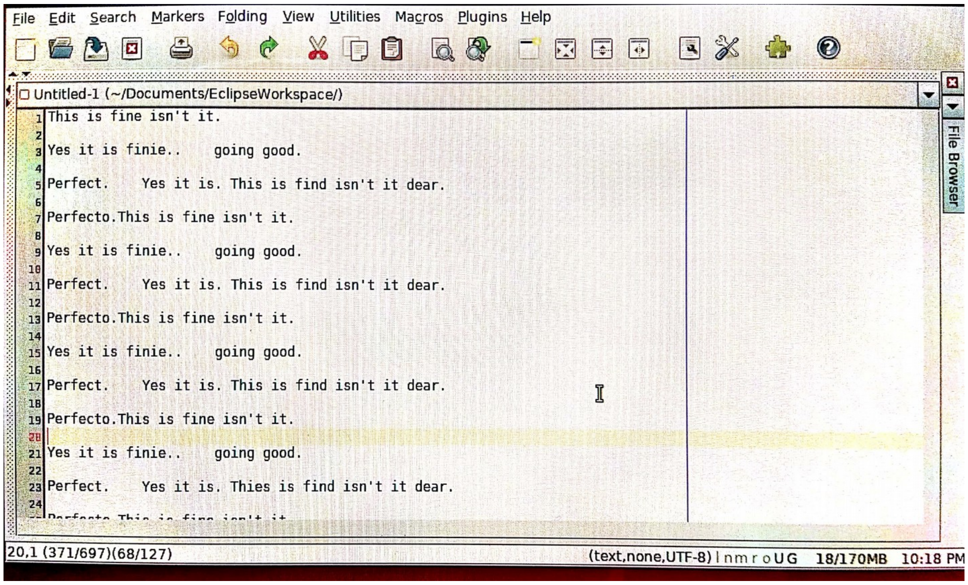
File Edit Search Markers Folding View Utilities Macros Plugins Help
Untitled-1 (~/Documents/EclipseWorkspace/)
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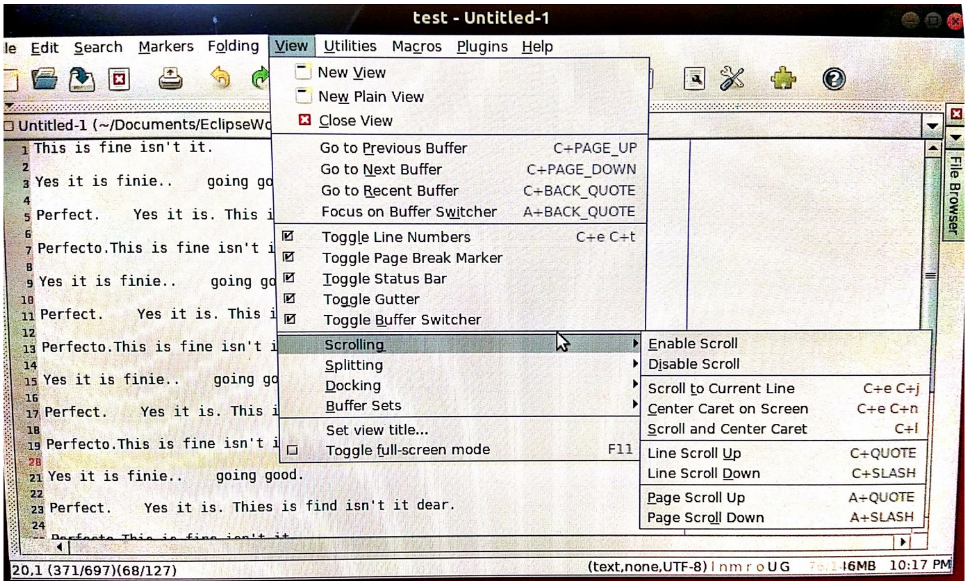
Figure: GUI with scroll bar disabled.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le Edit Search Markers Folding View Utilities Macros Plugins Help
Untitled-1 (~/Documents/EclipseWo
New View
New Plain View
Close View
Go to Previous Buffer C+PAGE_UP
Go to Next Buffer C+PAGE_DOWN
Go to Recent Buffer C+BACK_QUOTE
Focus on Buffer Switcher A+BACK_QUOTE
☑ Toggle Line Numbers C+e C+t
☑ Toggle Page Break Marker
☑ Toggle Status Bar
☑ Toggle Gutter
☑ Toggle Buffer Switcher
Scrolling
Splitting
Docking
Buffer Sets
Set view title...
□ Toggle full-screen mode F11
Enable Scroll
Disable Scroll
Scroll to Current Line C+e C+j
Center Caret on Screen C+e C+n
Scroll and Center Caret C+l
Line Scroll Up C+QUOTE
Line Scroll Down C+SLASH
Page Scroll Up A+QUOTE
Page Scroll Down A+SLASH
File Browser
20,1 (371/697)(68/127)
(text,none,UTF-8) I n m r o U G
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This is fine isn't it.

Yes it is finie..    going go

Perfect.    Yes it is. This i

Perfecto.This is fine isn't i

Yes it is finie..    going go

Perfect.    Yes it is. This i

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Yes it is finie..    going go

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Figure: GUI displaying Enable/Disable Scroll in scrolling

Note: The keyboard are captured while working with JEdit so we have to improvise and take the screenshot from external device.