

Change request log

1 Team

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2 Change Request

Change request #je-2 where jEdit displays the horizontal and vertical scroll bars whenever the content of the opened document exceeds the size of the editor. Implement a Toggle Scroll Bars option in the View menu that allows to show/hide the scrollbars.

<https://github.com/surajeswar22/cs515-801-s20-Eswaran-jedit>

3 Concept Location

Step #	Description	Rationale
1	<i>I ran the system</i>	
2	<i>I went on for Scrolling feature in the project.</i>	<i>Because Line Scroll plays an important role in enabling/disabling options for jedit.</i>
3	<i>I found out the feature "scrollUpLine" from various scroll class files in it.</i>	<i>Since scrollUpLine is the functionality that can be used for scrolling. I just need to add enable/disable option in it.</i>
4	<i>I marked the class Text Area, action.xml, java_hui.props and java_en.prop as located</i>	<i>These classes and files must be modified.</i>

Time spent (in minutes): 60

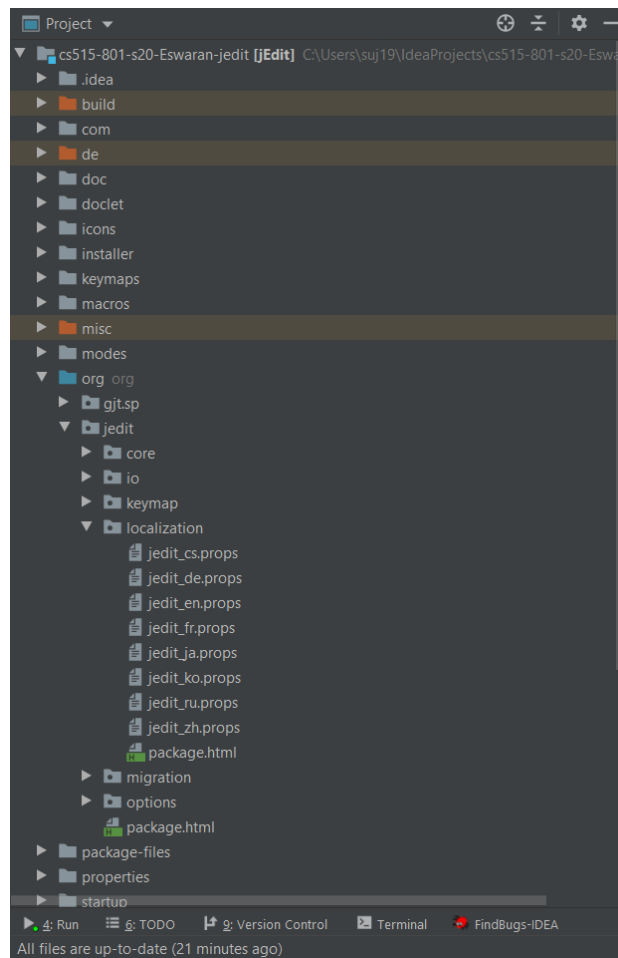


Figure 1: List of classes to be modified for enabling/disabling scroll

4 Impact Analysis

Step #	Description	Rationale
1	<i>I inspected the class TestArea, action.xml, jedit_en.prop and jedit_gui.props. Such a class and files were marked as "to change" as well</i>	<i>To track the classes that could be impacted by the change. These files are needed to be changed since for adding enable/disable option in scrolling it is necessary to implement these files so that it meets the requirements.</i>
2	<i>While working on it, file textarea_actions.xml was removed from the list of changes.</i>	<i>It was considered to be rejected since even though the changes were made it does not reflect on the GUI. Thus, this file can be discarded.</i>

Time spent (in minutes): 30

5 Actualization

Step #	Description	Rationale
1	<i>I need to change jedit_en.prop since it can be used for displaying it in GUI. Along with that action.xml is also needed to be updated for adding the action to be performed.</i>	<i>For implementing the item in the menu, I tried on using other similar changes for this feature. Adding few lines to add it in the functionality.</i>
2	<i>In TextArea, Scrollenable() and Scrolldisable() are been added since this method is called for scrolling functionality.</i>	<i>For defining what to be done while selecting su menu from the view option.</i>
3	<i>I compiled the modified program and tried with various inputs in the field.</i>	<i>To make sure the whole program works properly.</i>

Time spent (in minutes): 45

6 Validation

Step #	Description	Rationale
1	<i>Test case defined: Manual Testing Inputs: ...Selecting scrolling option Expected output: Sub option "Enable Scroll" and "Disable Scroll" present in the scrolling menu.</i>	<i>Checked if the sub option is present for selecting or not The test passed.</i>
2	<i>Test case defined: Manual Testing Inputs: ... Selecting Enable option Expected output: Scroll bar is seen while enabling</i>	<i>The test passed.</i>
3	<i>Test case defined: Manual Testing Inputs: ... Selecting Disable option Expected output: Scroll bar is seen while disabled</i>	<i>The test passed.</i>

Time spent (in minutes): 15

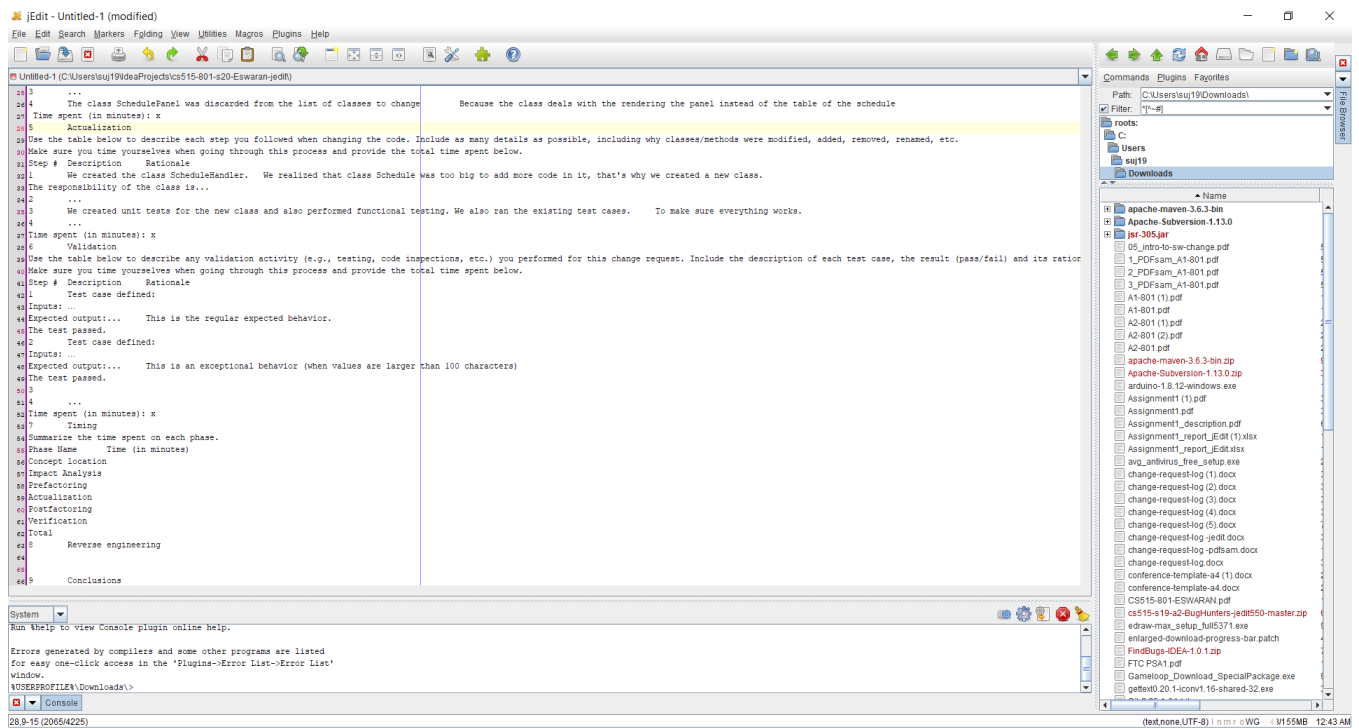


Figure 2: Output of the requested change disabled option

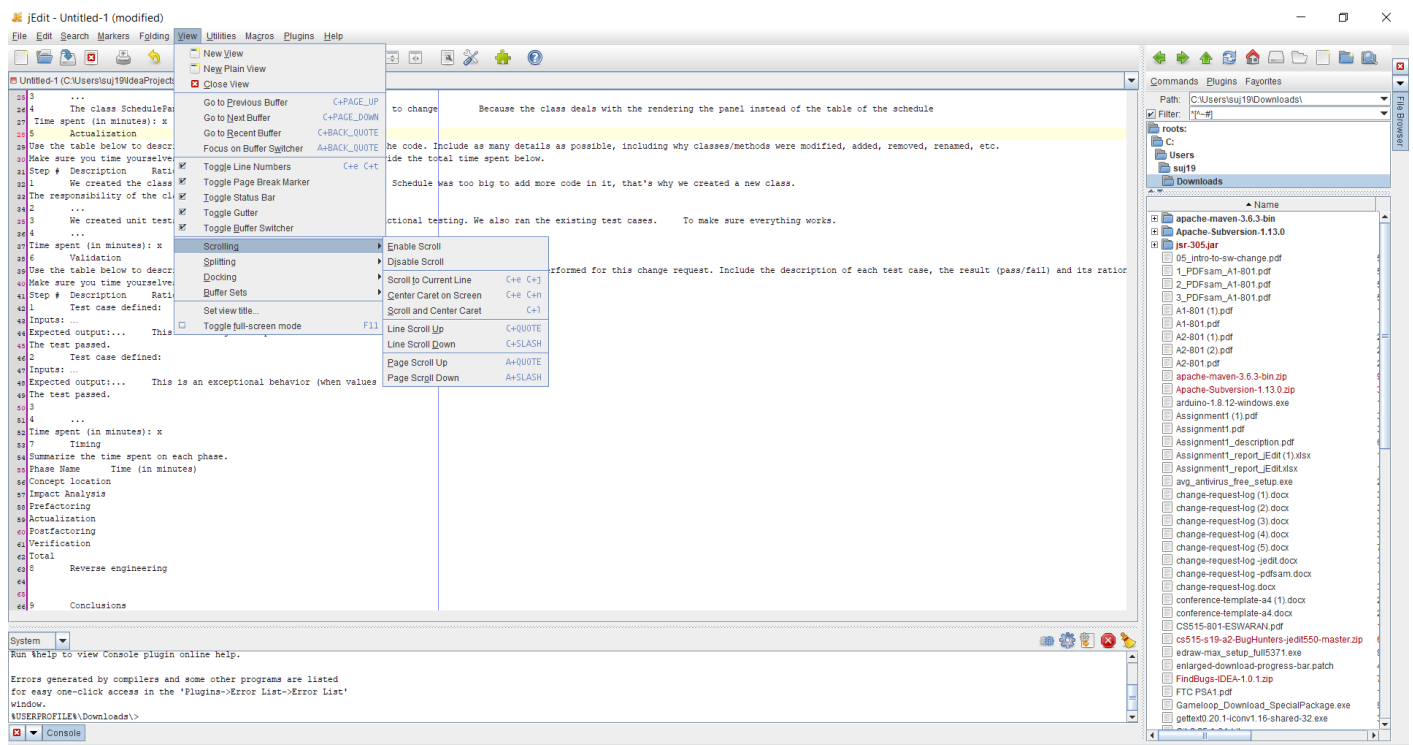


Figure 3: Output of the requested change options of enabling and disabled scroll

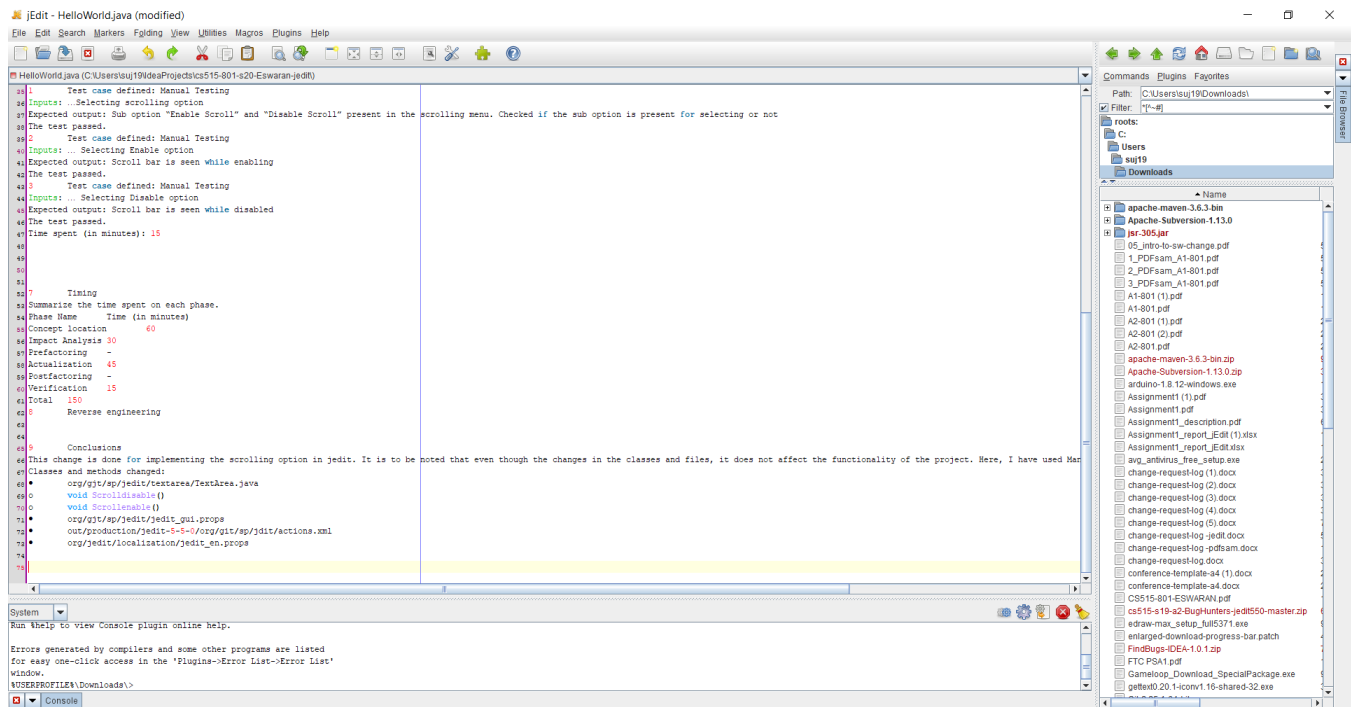


Figure 4: Output of the requested change enabled option

7 Timing

Summarize the time spent on each phase.

Phase Name	Time (in minutes)
Concept location	60
Impact Analysis	30
Prefactoring	-
Actualization	45
Postfactoring	-
Verification	15
Total	150

8 Reverse engineering

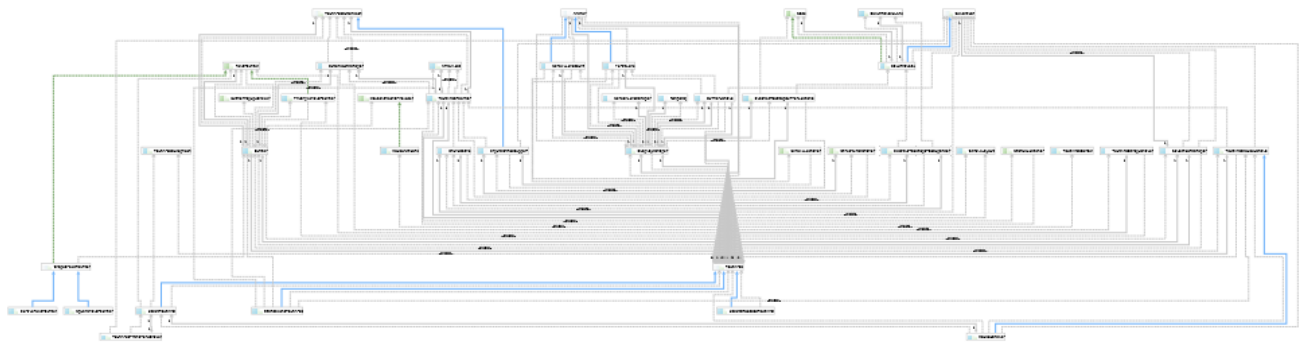


Figure 5: UML diagram for #je2

UML is basically a diagrammatic representation for a software. With the help of diagrams, it is possible to better understand several flaws and errors in software.

ACTORS	CUSTOMERS/USERS	The only actor of the system is the user where they deploy the feature or functionality in it.
TextArea	Generalization is the set that defines a set of generalization relationships that describe the way in which a superclass may be divided using specific subtypes.	The superclass is TextArea for this change request.
MouseWheelHandler		The function which controls the movement of the scroll from the mouse.
RequestFocusLayerUI		Here, the focus of which the textarea tend to move while moving.
LineCharacterBreaker		The breaking of words after some line width while scrolling wide.

Chariterator		The spacing of each and character while scrolling.
RectParams		The parameters of the page while enabling and disabling the scroll.
FocusHandler		The focus of each page while moving the page down or up.
AdjustHandler		The adjustment of the page layout.
MutableCareEvent		The error handler where in case of disconnected while scrolling

*Since the class diagram contains a list of variables and classes in the TextArea that's the file is available in github. The tool used for generating UML is SimpleUML from IntelliJ.

9 Conclusions

This change is done for implementing the scrolling option in jedit. It is to be noted that even though the changes in the classes and files, it does not affect the functionality of the project. Here, I have used Manual Testing where the functionality was used each time.

Classes and methods changed:

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

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