**PROJECT DESIGN**

**Java – ‘A matter of style?’**

**(File processing: layout and style issues)**

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| --- | --- | --- | --- |
| Points | Proposed | Actual | Reason (if any) |
|  |  |  |  |
| Tabbed Editing | To hold contents of separate files | http://www.merucabs.com/images/tick.png |  |
| File Rendering | New  Open existing file  Saving file  Close ( discarding changes) | http://www.merucabs.com/images/tick.png  http://www.merucabs.com/images/tick.png  http://www.merucabs.com/images/tick.png  http://www.merucabs.com/images/tick.png |  |
| Editing | Undo  Redo  Cut  Copy  Paste  Select All | http://www.merucabs.com/images/tick.png  http://www.merucabs.com/images/tick.png  http://www.merucabs.com/images/tick.png  http://www.merucabs.com/images/tick.png  http://www.merucabs.com/images/tick.png |  |
| Search | Find  Replace  GoTo | http://www.merucabs.com/images/tick.png  http://www.merucabs.com/images/tick.png  http://www.merucabs.com/images/tick.png |  |
| Smart Indentation | Counting opening and closing braces | http://www.merucabs.com/images/tick.png |  |
| Color Coding | Parsing XML file for keywords. | Hard coded the keywords into the project. | Finding difficulty in parsing the file. |
| Line Numbering | At the left of JTextPane | Not implemented | Messed up with proper alignment of numbers to the line of JTextPane |
|  |  |  |  |

**Points to Remember:**

* How Actions work and how we can implement our own actions
* A good overview of how regular expressions work.

**Difficult Areas:**

* As there is 1 class for find and replace both, so thought of adding tabs for find and replace via a single instance, ended with 2 instances for each as tabs are added according to the objects/components.
* Proper aligning of numbers with the line of JTextPane.

**CLASSES**

* CodeEditor: Main MDI frame class providing the base of other classes and GUI.
* Tab: a panel incorporating JTextPane and used to work on single file at a time.
* DialogFindReplace: a dialogbox and serves as a base for find and replace feature and instantiates PanelFindReplace
* PanelFindReplace: panel that’s incorporates the coding for find and replace feature.

**EVENTS**

File New (Creates new instance of Tab class)

Open (Creates new instance of Tab class and writes the text via file reader)

Save (writes the text via file writer to a file already specified)

Save As (writes the text via file writer)

Close (removes the instance of current active tab i.e. tabMain.remove()

Close All (removes instances of all the Tab class)

Close All But This (removes all the instances of Tab class leaving the current active instance)

Edit Undo (creating instance of UndoManager class and adding Listener to JTextPane )

Redo (creating instance of UndoManager class and adding Listener to JTextPane)

Cut (action of DefaultEditorKit.cutAction)

Copy (action of DefaultEditorKit.copyAction)

Paste (action of DefaultEditorKit.pasteAction)

Select All (action of DefaultEditorKit.selectAllAction)

Search find (creating instance of Pattern and Matcher class of RegularExpression(regex) package and implementing matcher.find() method. Once found adding highlighter to the matcher.start() to matcher.end())

Replace (implementing appendReplacement() and appendTail() method of Matcher class once the given text is found)

GoTo (setting the caretPosition to the length of text if the given lines is equal to the count of line.seperator)