

I guess I won't invent a wheel on this and just describe part of git workflow with minor changes.

So first there will be a initial version of file and each save action version will create diff file that will have hash of version, differences (changes, additions and deletions) with coordinates in file. The hash will be added to diff-list file with a date of diff, so user can see list of dated version on his interface.

This way there will be lot of changes with minimum amount of memory, so there will be something like chain.

To move backwards and forwards in that chain the system will revert or redo the changes in diff files. Showing difference will be easy. It will only display the diff file steps. That will be something like this`

left side {coordinate of row} : {Action} > {text} | right side {latest version of text}

examples

25 : Deleted > This part of text | [nothing here]

26 : Added > This part of text | This part of text

27 : Changed > This other part | Changed part of text.

Obviously it also can be colorised. For security there will not be possible to delete any of versions.

In case if user starts saving from previous version, which will create branch in chain, the process of going to other versions will work similar to chain, only it will get back to common parent and move forward to another version. Small graph representation

