RegEx Search & Replace Extension for Chrome and Firefox

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Abstract

The aim of this project was to build a browser extension to allow users to search and replace text with regular expressions in editable text input fields of web pages.

After evaluating existing extensions that were unsuccessfully attempting to implement this functionality, the new extension has been carefully designed, developed, and finally successfully released for Chrome and Firefox browsers.

In addition to the future-rich search and replace function, this plugin also adds the ability to save favorite patterns, store search history, or predefine text templates that can be inserted into the editable area of a page.

The software followed an iterative development process, where user feedback was collected via several means, including Google Analytics, which was used to track user interaction, and a support website used to collect user feedback comments.

After the initial release, about twenty updates have been subsequently released over the span of a few months. This iteration was further supported by automated tests of several kinds.

The extension has received excellent reviews and at the time of writing has over 3000 weekly users (users from both browsers combined).

Acknowledgements

Thanks to

- Boris Grot - for supervising the whole project, and making important feature suggestions leading up to the first official releases of the extension on the Chrome and Firefox web stores
- Michael O'Boyle - for making suggestions, especially regarding Google Analytics
- Christoph Metze - for finding several important bugs that subsequently led to releases `1.3.2`, `1.3.3`, and `1.3.4`
- Daniel Tomberlin - for pointing out a use case when trying to search across multiple single-line inputs, and for updating his web store rating and review after I implemented it in `1.3.6`
- GitHub user MarkRH - for finding a bug that was later fixed in `1.1.3`
- StackOverflow user wOxxOm - for suggesting `Document.execCommand` API that I used to fix issues with templates in `1.2.0`

And also thanks to all those people who submitted user feedback or reviews.

Declaration

I declare that this thesis was composed by myself, that the work contained herein is my own except where explicitly stated otherwise in the text, and that this work has not been submitted for any other degree or professional qualification except as specified.

(*Dalimil Hajek*)

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1.1 Using Sections

Divide your chapters into `sub-parts` as appropriate.

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Bibliography

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