

Integrate and Extend the Visual Editor for Sweble Hub

Summary

The Sweble Hub software is a wiki-like web application for knowledge management and end-user programming. To allow users to comfortably edit articles a visual editor (WYSIWYG) has to be integrated into the Sweble Hub web frontend. The goal of this thesis is to design and implement a Node.js/browser based architecture that integrates the MediaWiki VisualEditor. The architecture has to enable easy extension of the editor with context-dependent menus.

Work Results

- Literature review
 - Research collaborative concurrent editing algorithms and data structures
- Design, implementation and documentation of visual editor component
 - Article can be edited using the MediaWiki VisualEditor in the browser
 - An extension mechanism helps adding context-dependent menus to the editor
 - The full article feature set is supported by the editor
 - Changes made by the user are sent back to the server as edit objects
- Discussion and evaluation of the implementation
 - Acceptance tests demonstrate the support of the full article feature set by the editor
 - Documentation explains context-dependent menu extension mechanism
 - The article representation on the server is continuously updated by the edit objects

Supervisor

Dipl.-Inf. Hannes Dohrn, hannes.dohrn@fau.de

Prof. Dr. Dirk Riehle, dirk.riehle@fau.de

Open Source Research Group
Computer Science Department
Friedrich-Alexander University

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Read the description on [UnivIS](#)

Resources

- <https://www.mediawiki.org/wiki/VisualEditor>
- https://www.mediawiki.org/wiki/Future/Real-time_collaboration
- Ignat, Claudia-Lavinia, and Moira C. Norrie. "Customizable collaborative editor relying on treeOPT algorithm." ECSCW 2003. Springer Netherlands, 2003.
- Sun, David, and Chengzheng Sun. "Operation context and context-based operational transformation." Proceedings of the 2006 20th anniversary conference on Computer supported cooperative work. ACM, 2006.