Bachelor / Master Thesis Description; Status: Allocated on 14.08.2013

A Wiki Framework for the Sweble Engine

Summary

At the Professorship for Open Source Software we have developed a formal parser for MediaWiki's markup format, a format that drives Wikipedia and many other wiki instances. We have also implemented a simple clone of the MediaWiki engine and we are working on a transformation and refactoring framework including a visual editor frontend that facilitates access to these new features. The goal of this thesis is to develop a software that connects the above mentioned components, attaches a storage solution with revision control and adds a web frontend to form a fully functional wiki.

Work Results

- Tasks:
  - Design a **storage layer** that facilitates retrieval of content, searches over the whole wiki and enables revision control.
  - Design a well-defined and **documented REST API** to allow access to these resources.
  - Implement a web application that connects and integrates the above mentioned components.
  - **Investigate** typical tasks of wikipedia editors and **implement refactoring dialogs** that will support editors in those tasks (the refactorings themselves are not part of this thesis, only the UIs to those refactorings have to be implemented).
- Results:
  - A web application that offers basic wiki functionality (search, view, edit, edit history)
  - A list of possible refactorings/transformations (not exhaustive) and refactoring dialogs that act as user interface to those operations.
  - Discussion and evaluation of strengths and weaknesses
    - of the storage layer API design and
    - of the REST API design
  - Explain implementation choices of the application, where it can be improved and how it can be extended.

Supervisor

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Link to doc: http://osr.cs.fau.de/fun

Grading framework: http://osr.cs.fau.de/2013/03/25/how-we-grade-final-theses-grading-framework/