

Ext. a Patch-Flow Crawler for Gitlab and Github Enterprise

Summary

We want to measure code level collaboration in inner source. For achieving this goal we developed selected components of a crawling framework for source code configuration management systems (SCM) and forges.

Objective of this bachelor thesis is to extend the patch-flow crawler and enable it to measure patch-flow within Github Enterprise and Gitlab Forges. An existing adapter for the Git SCM can be reused (and improved) for this task.

Work Results

- Literature review
 - Relevant design patterns (Gamma et al., Fowler et al., Riehle et al., ...)
 - Quantification of collaboration using software repositories
 - APIs of Gitlab, Github Enterprise
 - Organizational model underlying Gitlab, Github Enterprise
- Implementation of Github Enterprise, Gitlab adapters
 - Component for identifying developers from pseudonyms
 - Component for identifying developers' and projects' organizational unit
 - Component for identifying patches' project
- Embedded Adapters into existing framework
 - Improvement of existing adapter interfaces
 - Strategy for adapter selection at runtime

Supervisor

Maximilian Capraro, maximilian.capraro@fau.de

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

Open Source Research Group

Computer Science Department

Friedrich-Alexander University

More information: <http://osr.cs.fau.de/theses/resources/>