

An Accounting Tool for Inner Source Contributions

Summary

Inner source (IS) is the use of open source development practices within an organization. In inner source, companies open up source code internally so that all employees can see, reuse and contribute changes to it independently of their team. Naturally, managers have an interest in learning which IS components their subordinates contribute to and from whom contributions are coming to their components.

In this thesis, the student will build a software tool to account for (listing in a ledger, aggregating) and visualize (sankey diagrams, other visualizations) contributions within the organization. Jointly with the supervisor, the student will elicit requirements by developing, maintaining and refining a product backlog. The software will be based on an existing object oriented model and implementation composed of Java REST services (Jersey) and a JavaScript client (Angular 2).

Details

- Literature review, investigation:
 - Patterns and frameworks for models in the accounting domain (Resource-event-agent model by Mc Carthy (1982), new interpretations such as valueflo.ws)
 - Visualizations of accounting information and flows of values in an organization
- Methods
 - Software design, implement with Java and TypeScript
 - Scrum and inner source influenced development approach
 - Requirements elicitation with a product backlog (jointly with supervisor)
 - Releasable version after every merge request
 - Intensive automated unit and module testing
- Work results
 - Requirement elicitation in form of a product backlog (in collaboration with supervisor)
 - Tool visualizing and accounting for inner source contributions (rough scope here: <https://goo.gl/bgJbkP>)

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