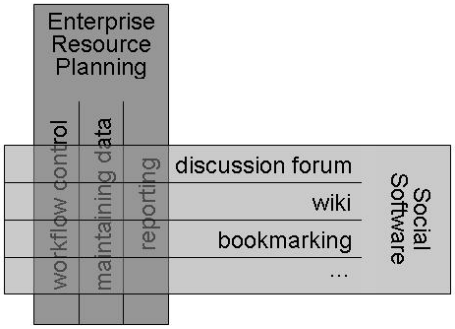
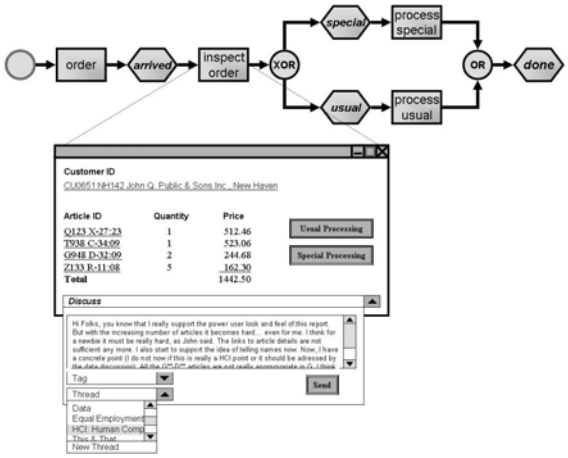
Master Thesis

A Platform for Weaving Web 2.0 Features into Web-based Applications

In this thesis you will design and prototypically implement a new tool that allows social web features to be tightly intertwined with the pages of an existing web-based application. The new features (wikis, bookmarking, enterprise content management etc.) are weaved as crosscutting aspects into the target application. Activities and data that arise through the crosscutting features are tightly related to the reports and forms of the target application for further exploitation and analysis. Web-based applications are not only important as B2C systems but also form a great deal of today's enterprise applications. There is a wide range of interesting application areas for such a platform: enterprise knowledge management, software testing, software quality improvement, legacy system refactoring, enterprise application integration, requirements engineering and so on. For the implementation capture-replay components of existing open-source test tools like Selenium may be useful.





Tasks of the thesis:

- Overall system analysis, architecture and design
- Examination of possible and selection of appropriate open-source test tools and social software products for code reuse
- Prototypical implementation (including proper testing and documentation) for standard web-based applications.
- Discussion of possible application areas.
- Evaluation of the tool in a real-world application scenario
- Outlook onto the design and implementation of a working version of the tool, also for other client technologies (active web pages, rich clients, mobile code)

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General Literature:

- Dirk Draheim. Smart Business Process Management. In (Layna Fischer, Editor): 2011 BPM and Workflow Handbook, Digital Edition. Workflow Management Coalition, February 2012.
- Felderer, M. and Chimiak-Opoka, J. and Zech, P. and Haisjackl, C. and Fiedler, F. and Breu, R. Model Validation in a Tool-based Methodology for System Testing of Service-Oriented Systems. International Journal On Advances In Software, 4 (1&2). pp. 129-143, 2011.
- Ikujiro Nonaka. The Knowledge-Creating Company. Harvard Business School Press, 2008.