The Effects of Refactoring on Embedded Systems Software Engineering

Task

Refactoring is a continuous process that changes the program structure during the running software development. The aim is to produce an understandable, well structured code and to touch up “bad” program segments. The specific point here is a constant change that is being arranged permanently without a direct need for it, e.g. due to occuring errors.

The aim of this diploma thesis is the analysis of produced source codes, their structure and their development process. The raw data from the thesis Experiment on the Applicability of Refactoring on Embedded System Software Engineering can be used as base data. The evaluation shall on the one hand, specify the structure and differences through simple structural examination and on the other hand, allow a further evaluation of the source code through yet another experiment. Possible base data for the evaluation and the pre-work can be retrieved from Development of a Web-Based Tool for the Assistance in Code-Readability Experiments. The implemented tool created there, can be used for carrying out the experiment.

The conditions of this thesis are the willingness to get familiar with experimenting in the software engineering domain.

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Fields of Study

- Computer Science

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