Comparing Product Maps and Feature Diagrams

Master Project Proposal

Motivation and Context

A *software product line* is a set of systems with well-defined commonalities and variabilities that are developed by managed reuse. The products of a software product line are usually described by their features. In order to specify the set of possible products of a product line, product maps or feature diagrams can be used. Product maps specify the products by explicitly denoting their features. Feature diagrams define the set of possible products by denoting the set of valid feature configurations.

Project Goals

The goal of this master thesis project is to compare product maps and feature models in their ability to express the scope of a product line. This comprises the following tasks:

- Analysis of the existing literature on feature diagrams and their extensions
- Definition of a translation from feature diagrams to product maps and vice versa
- Comparison of both approaches with respect to strengths, application scenarios, expressivity, etc. using a case study of a software product line

Prerequistes

Programming Experience, Knowledge in Software Engineering and Product Line Engineering ("DAT165 Software product line engineering")

Contact

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