Abstract

Software Product Lines have emerged as a well-known approach for software reuse. Requirements of product line are organized into features in Feature Oriented Domain Analysis approach. Feature models are widely used to model the information gathered during domain analysis and it is not simply comprehensible to stakeholders. During the early stages of software development the interaction with stakeholders is mainly inconvenient. For this explanation, natural language (Language Extended Lexicon) is still widely used to model requirements information. It is in general understandable by stakeholders thus encouraging their participation but LEL does not provide design level of a system. To obtain design level of a system there is need to transform LEL symbols to UML class diagram as its elements are in abstract form representing blue print of a system. To achieve this transformation we describe in this paper a transformation process to derive a UML class diagram from natural language oriented requirement model, known as Language Extended.
Transformation from LEL to UML


Index Terms

Computer Science

Software Engineering
Keywords
Uml Class Diagram   Natural Language   Requirements Models   Software Product Lines

Feature Models

Language Extended Lexicon