TITLE

Evolutionary Development of Frameworks – from Projects to System Families

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ABSTRACT

Object-oriented software engineering did not reach all productivity objectives expected in the beginning. A lack of methodical support results in low comprehensibility of code and documentation. Reusability was attained only in projects, in which a system family was the target. This paper examines different attempts with respect to their systematic support for development of system families. Based on Domain Analysis, there is introduced an evolutionary methodology for reaching multiple use of software engineering results. The approach starts from an existing system and offers a pragmatic and systematic way to describe common and variable parts of systems explicitly and comprehensively. Based on this descriptions, the development of systems with high adaptability and maintainability is attainable. Generative Programming is mentioned as a new software paradigm offering a way to simplify the implementation process by utilization of meta-programming.