GENERATIVE APPLICATION DEVELOPMENT USING SCRIPTING MODEL OF APPLICATION GENERATORS

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Abstract: The paper offers graphic and aspect oriented model of application generators based on scripting languages. Generative programming based on scripting languages is an alternative to recently predominant object oriented approach. Scripting model is a model of application generators, while object model defined by UML diagrams is only an application model and has considerable problems with aspect modeling. Except that, scripting model is simpler than the object and enables more flexibility in development of generators. The paper also suggests the cyclic generative model of application development based on scripting model, which includes parallel development of generators and applications. Such application development enables shortening of application development cycle, performance optimization and simplifying of maintenance. Scripting model is tested in development of application generators in Perl and development of different web applications. It's shown that offered scripting model enables rapid development and simple adaptation of generators to the problem domain modifications.

Key words: generative programming, scripting model, generative application development, aspects, generator

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DOI: 10.2507/daaam.scibook.2006.39