Using Annotated Conceptual Models to Derive Information System Implementations

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Abstract

Producing production quality information systems from conceptual descriptions is a time consuming process that employs many of the world's programmers. Although most of this programming is fairly routine, the process has not been amenable to simple automatic parameters to make all the implementation decisions that are required, and numerous special cases arise in practice. Most commercial CASE tools address these problems by essentially implementing a waterfall model in which the development proceeds from analys partially automated manner, but the analyst/programmer must heavily edit each intermediate stage.

This paper demonstrates that by recognising the nature of information systems, it is possible to specify applications completely using a conceptual model that has een annotated with additional parameters that guide automated implementation. More importantly, it w are sufficient to implement realistic applications, and techniques will be described that enabled the author's commercial CASE tool, the Intelligent Develope to automated implementation without requiring complex theorem proving technology.

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