

Title: Metalanguage generating source codes

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Abstract: Modern programming goes hand-in-hand with object-oriented programming languages. These languages offer a lot of features, either built-in elements or standard libraries. Skillful programmer is able to maximize the effectivity of these features. One of the skills of such programmer is considered to be knowledge of the design patterns. In practice, they help with producing simple, clean and extendible source code. Such code leads to development of top-notch software. Goal of this thesis is to show some of the design patterns and, more importantly, show how they are supposed to be implemented. Among other things, I will also mention few templates that I personally consider useful to know.

Keywords: programming language design, implementation of a compiler, design patterns, templates