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Concise and Consistent Naming: Ten Years Later

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***Abstract*—Approximately 70% of the source code of a software system consists of identifiers. Hence, the names chosen as identifiers are of paramount importance for the readability of computer programs and therewith their comprehensibility. However, virtually every programming language allows programmers to use almost arbitrary sequences of characters as identifiers which far too often results in more or less meaningless or even misleading naming. Coding style guides address this problem but are usually limited to general and hard to enforce rules like "identifiers should be self-describing". At IWPC 2005 we proposed a formal model, based on bijective mappings between concepts and names, provides a solid foundation for the definition of precise rules for concise and consistent naming. The enforcement of these rules was supported by a tool that incrementally builds and maintains a complete identifier dictionary while the system is being developed. The identifier dictionary explained the language used in the software system, aids in consistent naming, and improves productivity of programmers by proposing suitable names depending on the current context. In this talk we analyze the first ten year of the model we proposed at IWPC 2005 by analyzing its impact on the program comprehension community as well as its applicability in practice.**

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