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Object-Oriented Program Comprehension by Identification of Software Components and Their Connexions

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Abstract : During the last decades, object oriented program- ming has been massively used to build large-scale systems. However, evolution and maintenance of such systems become a laborious task because of the lack of object oriented programming to offer a precise view of the functional building blocks of the system. This lack is caused by the fine granularity of classes and objects. In this paper, we use a post object-oriented technology namely software components, to propose an approach based on the identification of the functional building blocks of an object oriented system by analyzing its source code. These functional blocks are specified as software components and the result is a multi-layer component based software architecture.

Keywords: software comprehension, software component, object oriented, software architecture, reverse engineering

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