General requirements for a program visualization tool to be used in engineering of 4GL-programs

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Abstract
Program visualization can be used profitably to help a programmer gain an understanding of the program's meaning. In our context this process is called program analysis. The paper first points out that program analysis is highly individual and is influenced by the person involved and by the aim of the process. Secondly, it describes what consequences evolve out of the program analysis characteristics for a supporting tool. Four distinct, general properties of a visualization tool are presented, emphasizing the user and his changing interests. Thirdly, concepts are given for the visualization of 4GL-programs and a specific tool is described as an example of how the outlined requirements translate to a real application. A tree is used to represent different structural relations in the program and icons at the nodes facilitate the tree's perception

For a sketch of a displayed NATURAL-program see next page.