PFW as generator

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Abstract

Some months ago I presented on another conference the PFW: Programming Fundamentals Wizard, which is the improved version of helper tool for the subject Programming fundamentals. My web-based application gives place to collect the information from the tasks and it contains an editor for Nassi-Shneiderman diagram. This guide helps the students to keep the expected order of problem solving namely at first thinking and secondly coding or even collecting the information, creating algorithm independently from program languages then creating source code. Unfortunately deep testing is not specific and documentation is required only as homework based on an example.

This time I present two new functions of PFW. One of the new functions is good to generate the first, raw version of the documentation which must be edited even. Second function generates C++-like source code. I would like to emphasize that the primary aim of this application is not the generation, it was not developed because of this but this beta version of C++-like source code helps intensively the beginner programmers in the implementation and understanding the code. Generating a compilable and runnable source code is possible with using program-language-specific expressions in the Nassi-Shneiderman diagram.

Keywords: teaching programming, code generation, documentation

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