

SEMI-OOS – A Summary

See also:

- Pütterich, R.: Objektorientierte Softwareentwicklung an der Realschule. In: Schubert, S. (Hrsg.): Didaktik der Informatik in Theorie und Praxis, Bonn: Köllen, 2007, p. 321-322.
- Pütterich, R.: Realschulgemäße Softwareentwicklung mit SEMI-OOS. In: LOG IN, 28. Jg. (2008), Heft 150/151, p. 89-94.

School Adequate Development Environment for Modelling and Implementation of object-oriented Software

<http://www.semioos.de>

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SEMI-OOS enables pupils and teachers to create object-oriented software easily by determining the content structure (semantics) of a program via the respective editors for classes, methods and GUI structure. The system provides as much support as possible and also offers building blocks, which have only to be chosen accordingly, with the aim of minimising typographical errors.

The modeling of the classes in UML and the implementation in a viable Java program are tasks which are performed by the software itself. Therefore, it is not necessary to learn a specific syntax, or to have detailed knowledge of programming, which also appears irrelevant from a technical or educational point of view.

Besides Java itself, the software can also implement a "student-programming language", the syntax of which was chosen with the aim of being as intuitively understandable as possible.

SEMI-OOS was designed by myself specifically for use in the classroom. It is part of my current dissertation project at the Technische Universität München (Technical University of Munich) and takes into account personal experiences as a computer science seminar teacher and current didactical principles. Special attention has been paid to ensuring a balance between didactical reduction and a large-scale choice of different options. For example, with the use of class diagrams and structograms, an effective minimum of modelling techniques is being applied.

Software requirements:

Java - Compiler (JDK) version 5.0 or higher, free download at <http://www.sun.com>

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