

Comparison of problem-type oriented and instruction oriented methods of teaching programming through the use of Scratch programming language

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Abstract

The problem-type oriented and the instruction oriented methods are two significantly different methods of teaching programming. The first one introduces the necessary programming knowledge through the solution of gradually more complex exercises that are built upon each other, while the latter one focuses on the elements of the programming language, and its aim is to teach those in a certain grouping. Though both methods are widely applied, the use of the problem-type oriented method is much more preferable when teaching introductory programming, and the use of instruction oriented method should be avoided. With the presentation of the instruction oriented method I do not only intend to describe its flaws and imperfections, but also wish to highlight the real essence and advantages of the problem-type oriented method. For the comparison of the two methods I chose the Scratch programming language which is one of the most widely used and acknowledged tools for teaching introductory programming nowadays.

Keywords: teaching programming, programming methodology, problem-type oriented method, instruction oriented method, Scratch

MSC: 97Q60