

ABSTRACT

The aim of this thesis is to develop an educational methodology for the following languages: Markdown, HyperText Markup Language (HTML), eXtensible Markup Language (XML) and Scalable Vector Graphics (SVG); and to verify the methodology at Czech elementary schools on the lower secondary level.

An integral part of the methodology is also an introduction to the history and development, as well as the theory of syntax of the mentioned markup languages, necessary for teaching according to this methodology. The methodology uses specific examples, on which the students can verify their newly acquired knowledge in practice.

The verification of the methodology took place in the form of teaching at two Czech elementary schools. The teaching took place in the seventh grade within the compulsory elective subject of informatics, in the ninth grade within a compulsory subject. The expected differences in understanding the markup languages education in favor of the ninth year have not been confirmed. The motivation of the students proved to play much greater role than their age. The verification of the methodology has shown that it is necessary to pay careful attention to the precise formulation of the task assignments and guidelines to the students, to avoid confusion and substitution of the source code of the document containing the tags and the final formatted document.

The key result is that the markup languages education is comprehensible for the lower secondary level students and the presented educational methodology can be applied.

KEYWORDS

markup language, markup, tag, Markdown, HyperText Markup Language, HTML, eXtensible Markup Language, XML, Scalable Vector Graphics, SVG, educational methodology