

Can ActionScript find a place in introductory programming language: a systematic literature review

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Abstract

The growing demand of programming results in an increase demand for introductory programming courses. To attract students' interest and enable a better learning outcome, several factors are being investigated to improve the introductory programming language. The choice of introductory programming language is one of the most important topics among the area of programming education. As ActionScript has some visual feature, it is to be investigated whether it can be part of the introductory programming language. Because of the end of life for Flash, Adobe has ceased the support of ActionScript. Will this result in a loss of a good introductory programming language? This paper investigates the characteristics of popular existing introductory programming language, in particular the Scratch, Python and Java through a systematic literature review. Then based on the findings, ActionScript will be analysed to find the place among the trending introductory programming language. Though the goal of this paper is positive, the final result is negative. The impact of death of Flash is the great decline in the popularity of ActionScript and the usage of it has been correspondingly reduced as well. Therefore, ActionScript is not to be considered as a good introductory programming language. However, the benefit of instant visual result can be synthesised with existing programmes like Scratch or Python to improve current introductory programming languages.