

Creative introduction of systematic programming with HTML5 support

László G. Menyhárt

Department of Media and Educational Informatics Eötvös Loránd University, Budapest, Hungary
menyhart@inf.elte.hu

This article is good for teachers and researchers who are interested in introductory programming. I present a new method to get data at implementation and test algorithms that we use to practise algorithm patterns. Based on our systematic programming approach on courses Programming Fundamentals on ELTE first we design the application creating specification and algorithm, second we are coding and finally we do testing. Source codes stand three parts: reading input data, implementing the algorithm and show the result. We use simple console applications to do this. Our problem is that our students are not enough interested in this DOS-like black-window-applications where they waste time with implementation correct reading methods to get right input data. In an our earlier article [?] we present that JavaScript is usable in web-browser environment to teach introductory programming. We have already analyzed how we can use HTML5's canvas to increase our students motivation with graphical games in the browser. Now I present a solution how we can process a picture to get easily input data and focus to the algorithm implementation. This approach give an opportunity to read source codes of frame applications and concentrate to the main task.

References

- [1] Gy. HORVÁTH, L. MENYHÁRT, Teaching introductory programming with JavaScript in higher education, Proceedings of the 9th International Conference on Applied Informatics Eger, Hungary, January 29–February 1, 2014. Vol. 1. pp. 339–350 doi: 10.14794/ICALI.9.2014.1.339