

Code School: Learn to Code by Practicing

Sándor Király, Tamás Balla, Gábor Kusper

Eszterházy Károly University of Applied Sciences

ksanyi@aries.ektf.hu, balla.tamas@ektf.hu, gkusper@aries.ektf.hu

Today the IT industry provides an attractive career choice to novice software developers, but even then majority of the students pursuing higher education in computing field are not coming ahead with full competence and capabilities to meet the industry expectations. It has been observed that such students are not much focused on computer programming during their school studies. The main reason of disinterest in computer programming is identified as the lack of motivation and engagement of students in learning the programming concepts. [1] kodolosuli.hu is a learning portal offers interactive programming courses and coding challenges in three different programming languages: C++, C# and Java. It has been developed for youngsters who are interested in computer programming but do not know where to start. Students, who are not offered programming lessons at school and teacher help are welcome. The framework of this site has an extensive grader tool that helps students testing their codes without intervention from a teacher, thus providing a flexible learning experience. The gamification in this portal is expected to increase student' engagement and motivation in learning. [2][3] The developed LMS offers the authors to be able to improve the courses according to solved problems and the comments of the forums. Tasks are stored in an exercise repository to make creating tests and exams easier. The course is available in Hungarian.

References

- [1] Balraj Kumar, ParulKhurana, Gamification in education - learn computer programming with fun, International Journal of Computers and Distributed Systems, Vol. No.2, Issue 1, December 2012, pp. 46-53.
- [2] Michael Sailer, Jan Hense Heinz Mandl and Markus Klevers, Psychological Perspectives on Motivation through Gamification, Interaction Design and Architecture(s) Journal - IxD&A, N.19, 2013, pp. 28-37.
- [3] Adrián Domínguez, Joseba Saenz-de-Navarrete, Luis de-Marcos, Luis Fernández-Sanz, Carmen Pagés, José-Javier Martínez-Herráiz, Gamifying learning experiences: Practical implications and outcomes, Elsevier, Volume 63, April 2013, pp 380–392.