

Motivating students' study with ICT

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Abstract

Nowadays the ICT (Information and Communications Technology) is one of the most important and most popular scientific areas. Universities offer several different degree programmes related to STEM and also hundreds of students enrol in such bachelor programmes of our university. Managing a course as an instructor with up to 200 or 300 students needs a lot of effort. One possibility is to support these courses with ICT solutions, especially with web and mobile applications. Several different e-learning frameworks have (mostly) well-designed interfaces to give tasks, assignments to students and to collect solutions, as well as they also provide tools to produce and organise online materials. Although that sounds great, still it is not sufficient because students need additional support: they can easily loose their motivation when they do their exercises without any diversity. Gamification is one of most popular methods that can be found in almost each area of our life. We can gamify all the processes and engage participants with implementing game-based methods and elements that are derived from real games. In this paper we would like to present two developments that deal with gamification at the University of Debrecen, Faculty of Informatics. The first one is a web application that gamifies the use of an online evaluation environment for programming. The second one is a mobile application that implements game-based elements in an environment that is designed to improve spatial skills.

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