Editorial

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I am proud to conclude also the fourth year of the International Journal of Serious Games with a new issue containing five excellent papers, that I will present in the following. The journal is constantly growing, thanks to the competence and the availability of a great community of authors, reviewers and readers, and this is the best basis for a proficuous new year 2018.

"Overview and Comparative Analysis of Game Engines for Desktop and Mobile Devices", by Christopoulou and Xinogalos [1], provides an interesting and exhaustive overview and comparison of game engines for various platforms, with particular attention to mobility. In order to validate the results of the analysis, a shooter game was developed for Android devices based on official tutorials of the two game engines that came out to be more powerful, namely Unity and Unreal Engine 4.

"Metrics Feedback Cycle: measuring and improving user engagement in gamified eLearning systems", by Atkins et Al. [2], presents the identification, design and implementation of a set of metrics of user engagement in a gamified eLearning application. The 'Metrics Feedback Cycle' (MFC) is introduced as a formal process prescribing the iterative evaluation and improvement of application-wide engagement, using data collected from metrics as input to improve related engagement features. This framework was showcased using a gamified eLearning application as a case study, which showed that the MFC has applications in gamified systems that seek to maximise engagement by iteratively evaluating implemented features against a set of evolving metrics.

In "Investigating Usability, Game Design, and Interaction Guidelines for Digital Game-based Exercises for Elderly", Pyae et Al. designed and developed a digital game-based Skiing activity for elderly people [3]. The game was evaluated in Finland and Japan to investigate user feedback. The findings from both studies show that digital games are useful for promoting elderly people's engagement in physical activities. While digital games are promising to be used as an alternative solution for promoting the Japanese elderly participant's physical activities, the Finnish elderly participants recommend to use it when they don't have access to non-digital physical exercises.

"Exploring the impact of freeform gameplay on players' experience: an experiment with maze games at varying levels of freedom of movement", by Kirginas and Gouscos [4], describes an experiment to examine whether different versions of the same entertainment game, which differ only in terms of freedom of movement that incurs varying degrees of freeform gameplay, elicit different kinds of player experiences. The findings from the study demonstrated that the digital game that offers the greatest extent of freeform gameplay led to better gaming experience than the digital games with lower extent of freeform gameplay.

"Green My Place: Evaluation of a Serious Social Online Game Designed to Promote Energy Efficient Behaviour Change", by Cowley and Bateman [5], presents a case study of Green My Place (GMP), a series game promoting energy-efficiency. GMP deployed site-specific metrics distinguishing it from similar projects 'disembodied' from the environments they are intended to affect. The game's design methodology – a massive multiplayer online game (MMOG) framework with atomic mini-games linked to specific learning materials – offers a scalable generic solution applicable to any domain entailing awareness/education. Field study evaluations show (weak) positive evidence of a positive impact, but lack of traction hindered success. The authors conclude that although the game itself was a noble failure, the evidence suggests that successful behavioural influence may be independent of degree of engagement – a finding with potential significance for any game with learning objectives.

References

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