Gam-R – Gamification Reloaded

4ᵗʰ International Workshop in Conjunction with the
Mensch und Computer 2021 Conference in Ingolstadt, Germany

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KEYWORDS

Gamification, Game-based Learning, Game Based Learning, Serious Games, Pervasive Games

1 Topic and content of the workshop

Gamification as a scientific concept for the use of game-like elements in a non-game context [3] is here to stay. The concept gets recognition and adaptation in a wide variety of research and application areas [6, 11]. Among other areas, gamification can from a scientific perspective help to improve the motivation for education [19], to engage with a healthier lifestyle [20], use psychological aspects for persuasive systems [21], help with social isolation during lockdown [22] and sets the basics for rising industries like esports [23]. Also, previous Mensch und Computer conferences have shown the relevance of the concept for researchers and practitioners e.g., in the field of human-computer interaction (HCI) [1, 4, 7, 9, 10, 13, 16].

The workshop *Gam-R – Gamification Reloaded* was successfully conducted for the first time at the Mensch und Computer conference 2018 in Dresden, Germany [10] and got a positive response from more than 30 participants. The second full-day implementation in 2019 in Hamburg, Germany also resulted in a fruitful workshop with 33 participants. The papers presented at the workshops addressed innovative approaches to the broad use of gamification in science, business, or UX design [2, 5, 8, 12, 14, 15]. In 2020 during the COVID-19 pandemic, 26 participants gathered online to discuss topics related to gamification, game-based learning and how to teach coding [16, 17, 18].

Each time the participants expressed great interest and engagement in the workshop. It is therefore evident that the workshop has now been established long-term in its fourth edition. To meet the demands of the workshop and the community, a stronger international focus is now being pursued.

The workshop provides an opportunity for researchers and practitioners to present and discuss innovative and (not yet fully matured) research ideas. In addition, applications, or studies about gamification with a sufficient scientific standard are welcome. The presented studies can then be discussed at the workshop within a group of experts to obtain feedback from the community for e.g., further projects. We welcome submissions from the following topics but are not limited to these:

- Use of gamification in various contexts such as in training and learning contexts, in business and open science.
- Target group-specific use of gamification for different age groups and stages of life, e.g., for children or pensioners.
- Analysis of individual game elements and their interactions with each other.
- Implementation of gamification for augmented, virtual, or mixed reality.
- Definitions and differentiation between gamification and other related fields.
- Future of gamification in the spirit of long-term motivation and the preservation of motivation in general.
- Novel and agile evaluation methods for gamification effectiveness testing.
- Adaptive gamification solutions based on individual user behavior and user characteristics and personality.
- Failed gamification projects which provide insight and added value for others.
- Ethical aspects and dimensions of gamification.

The website for the workshop can be found at https://www.gamification-reloaded.com.

2 Objectives, planned activities and target audience of the workshop

This scientific workshop aims to achieve the following goals:

- Presentation and discussion of innovative ideas and applications respectively scientific studies about gamification.
- Networking of researchers in the field of gamification.

- Increase of visibility of gamification and planning of more (scientific) activities about gamification.

The workshop consists of two different parts. The first part includes the presentation and in-depth discussion of selected papers, which will also be included in the workshop proceedings of the Mensch und Computer 2021 conference. The selection of the papers will be done by the organizing team according to a preceding peer review, whereby at least three reviewers will evaluate each submission. In previous years, between two and four submissions were selected for presentation, which is also the intention for 2021. This first part will last between one and a half and two hours.

In the second part of the workshop, a discussion on open (research) aspects, further research goals and a future joint approach will take place. The focus will be on networking and, if applicable, the planning of activities around the topic of gamification. We want to realize this using a Barcamp format where participants can share their practical experiences with gamification and derive relevant research questions for the future. For prior coordination, topics should be entered in advance in our Etherpad: https://etherpad.wikimedia.org/p/gamr2021. Although we have an open-end session, we expect that this second part will also last between one and a half and two hours.

A final objective is to turn the results of the second part of the workshop into a publication. To do this, we will work on a voluntary basis together with the hosts of the Barcamp sessions and we will coordinate jointly. Details will be clarified either on the day of the workshop or in a subsequent meeting between those interested.

We are fully aware of the COVID-19 pandemic. We will conduct the workshop entirely online.

A total of two submissions were made and accepted for this workshop. The accepted submissions are briefly presented here:

- *Mohamed Lakbir*, *Serkan Akyildiz*, *Pulkit Gupta*, *Marlyse Afola* and *Leonie Nora Sieger* (all from Hochschule Ruhr West University of Applied Science, Bottrop, Germany) have researched how gamification can be used to learn more about smart home systems. In particular, privacy and data protection aspects were researched. The study was conducted qualitatively and concluded that gamification has the potential to make people more aware of how personal data works and how it is handled.
- *Jonas Manske* (TU Dortmund University, Dortmund, Germany) conducted an empirical analysis of 405 surveyed employees. The study suggests that both reward elements and opportunities for self-expression and social cohesion through team collaboration opportunities in a gamified information system have a significant positive impact on the user's gamified experience.

3 Information about the organizing team

Athanasios Mazarakis is a postdoc at Kiel University, Germany and has been working on gamification and incentives in the interdisciplinary field between computer science, economics, and psychology for more than a decade. Numerous publications on gamification and successful workshop organizations (both also at the Mensch und Computer conference series) complete his competence profile.

Sophie Jent is a computer scientist and researcher at the Department of Electrical Engineering and Computer Science at the Lübeck University of Applied Sciences in the field of human-computer interaction. Her research focuses on the topic of gamification, on which she publishes and gives lectures in science as well as in practice.

Thomas Voit has been teaching and researching as a professor on the topic of gamification as a business informatics specialist at the Nuremberg University of Applied Sciences since 2014. Before joining the university, he was employed in the automotive industry where he initiated and led a gamification project to motivate managers to adopt new leadership roles. Since the end of 2016, he has been leading the gamification research project EMPAMOS in cooperation with the German Games Archive Nuremberg.

ACKNOWLEDGMENTS

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