Third International Workshop on *Gamification* for Information Retrieval (GamifIR'16)

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ABSTRACT

Stronger engagement and greater participation is often crucial to reach a goal or to solve an issue. Issues like the emerging employee engagement crisis, insufficient knowledge sharing, and chronic procrastination. In many cases we need and search for tools to beat procrastination or to change people's habits. Gamification is the approach to learn from often fun, creative and engaging games. In principle, it is about understanding games and applying game design elements in a non-gaming environments. This offers possibilities for wide area improvements. For example more accurate work, better retention rates and more cost effective solutions by relating motivations for participating as more intrinsic than conventional methods. In the context of Information Retrieval (IR) it is not hard to imagine that many tasks could benefit from gamification techniques. Besides several manual annotation tasks of data sets for IR research, user participation is important in order to gather implicit or even explicit feedback to feed the algorithms. Gamification, however, comes with its own challenges and its adoption in IR is still in its infancy. Given the enormous response to the first and second GamifIR workshops that were both co-located with ECIR, and the broad range of topics discussed, we now organized the third workshop at SIGIR 2016 to address a range of emerging challenges and opportunities.

1. BACKGROUND AND MOTIVATION

The purpose of the GamifIR workshop series is to bring together researchers and practitioners from a wide range of areas including game design, IR, human-computer interaction, computer games, and natural language processing in order to promote the development and exchange of research ideas and results relating to emerging areas of gamification within the context of IR.

Many research challenges in the field of IR rely on tedious manual labour. For example, manual feedback is required to assess the relevance of documents to a given search task, to annotate documents or to evaluate interactive IR approaches. A recent trend to perform these tasks is the use of crowdsourcing techniques, i.e., obtaining relevance labels from anonymous crowd workers via an open call. Although research indicates that such techniques can be useful, they fail when *motivated* users are required to perform a task for reasons other than just being paid per click, document judged or time spent on the task.

A promising approach to increase user motivation is by employing gamification methods, which has been applied in various environments and for different purposes such as marketing, education, pervasive health care, enterprise workplaces, e-commerce, human resource management and many more. The definition of gamification is still under discussion, e.g., it is still debated whether it covers methods "to facilitate and support the users' overall value creation" [7] or if it aims to enhance user experience using game design elements "regardless of specific usage intentions, contexts [...]" [1] or environments. Definitions pursuing the increase of user experience and overall value indicate that the application of gamification is goal oriented. Although several studies indicate that gamification can lead to increased user activity, a detailed analysis of users' personal perception of gamification principles has barely been studied. In the last few years, several frameworks on how to 'gamify' were proposed, but there are still many open questions on how to start (e.g., [9, 2]). We argue that a particular challenge of applying gamification is to find an elegant and subtle way of adopting and adapting game design patterns, mechanisms and elements to a particular problem or scenario.

Given the interest in the first and second GamifIR workshops[1] [4, 6] and the discussions emerging at these events, we are convinced that we are only at the start of seeing gamification becoming an established methodology to support and push forward IR in a variety of ways.

2. WORKSHOP GOALS & PROMOTION

By hosting a workshop in conjunction with SIGIR 2016, we intented to promote this area of research by bringing together IR and games researchers and practitioners. Potential topics for papers included:

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[1]For a detailed summary of the 2015 edition of the workshop series, we refer to [8].

- Gamification approaches in a variety of contexts, including document annotation and ground-truth generation; interface design; information seeking; user modelling; knowledge sharing

- Gamification in Crowdsourcing

- Gamification for teaching IR

- Gamification in recommender systems and Apps

- User engagement and motivational factors of gamification

- Player types, contests, cooperative gamification

- Long-term user engagement

- Search challenges

- Gamification design

- Applied game principles, elements and mechanics

The workshop was advertised via various Call for Papers that were distributed to relevant mailing lists, forums, and social media platforms. A website[2] was set up to provide further information and the Twitter account *@GamifIR* was used to promote the workshop.

3. WORKSHOP SUMMARY

All submitted papers went through a semi-blind peer-reviewing process where each submission was reviewed by at least three experts in the field. The workshop proceedings have been published by CEUR.[3]

Papers were presented at the workshop on 21 July 2016 in Pisa, Italy. Given the co-location of the workshop with the SIGIR conference, the event mainly attracted researchers working in the field of IR who presented their preliminary work on applying gamification to perform various IR related tasks such as crowdsourced document annotation, relevance assessment or interactive search.

4. ACKNOWLEDGMENTS

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[2] http://gamifir.com/
[3] Past editions of the workshop have been published by ACM [3] and CEUR [5].

5. REFERENCES

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