From Game Design Elements to Gamefulness: Defining “Gamification”

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Outline

- Introduction
- Precursors & Parallels
- Defining “gamification”
- Situating “gamification”
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- Q&A
This paper surveys and situates current uses of gamification within existing research to suggest a definition of gamification.

Gamefulness phenomena complementary to playfulness phenomena.
Introduction

• Gamification has arguably managed to institutionalize itself as the common household term.
  – productivity games, behavioral games, playful design…

• Industry uses of gamification fluctuate between two related concepts.

• Others tend to describe it practically and in terms of client benefits.
  – the process of using game thinking and game mechanics to solve problems and engage users
Precursors & Parallels

- Serious games (1960+)
- Digital games (2001+)
- Pervasive games (2001+)
- Serious gaming (2006+)
- "Ludification of culture" (2006+)

Precursors (1980+)
Games with a purpose (2001+)
Ludic design (2002+)
Playfulness (2005+)

http://gamification-research.org/2012/04/defining-gamification
Gamification is the use of game design elements in non-game contexts.
Defining “gamification” (II)

- **Game**
  - Paidia (playing) denotes a more free-form, expressive, improvisational, even tumultuous recombination of behaviors and meanings.
  - Ludus (gaming) captures playing structured by rules and competitive strife toward goals.

- **Playfulness** denotes the experiential and behavioral qualities of playing
- **Gamefulness** denotes the qualities of gaming, it provides a meaningful extensional ground for defining gamification.
Defining “gamification” (III)

- **Element**
  - treat fame elements as a set of building blocks or features shared by games
  - accept only elements that are unique or specific to games

“Ten Ingredients of Great Games” by Reeves and Read (2009) have multiple necessary conditions “classic game model” by Juul (2005)
# Defining “gamification” (IV) - Design

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
<th>Example</th>
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</thead>
<tbody>
<tr>
<td>Game interface design patterns</td>
<td>Common, successful interaction design components and solutions for a known problem in a context</td>
<td>badge, leaderboard, level…</td>
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<tr>
<td>Game design patterns and mechanics</td>
<td>Commonly reoccurring parts of the design of a game that concern gameplay</td>
<td>time constraint, limited resources…</td>
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<tr>
<td>Game design principles and heuristics</td>
<td>Evaluative guidelines to approach a design problem or analyze a given design solution</td>
<td>enduring play, clear goals…</td>
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<td>Game models</td>
<td>Conceptual models of the components of games or game experience</td>
<td>MDA, challenge, fantasy, curiosity…</td>
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<td>Game design methods</td>
<td>Game design-specific practices and processes</td>
<td>playtesting, value conscious game design…</td>
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Defining “gamification” (V)

- Non-game contexts
  - proliferate into all kinds of contexts
  - no specific context and goal of education and learning
Situationing “gamification” (I)

Figure 1. Gamification between game and play, whole and parts
Situationg “gamification” (II)

Figure 2. Situating gamification in the larger field
http://gamification-research.org/2012/04/defining-gamification
Conclusion

• It suggests that insight into “gamefulness” as a complement to “playfulness” marks a valuable and lasting contribution of studying “gamified” systems.

• The term “gameful design” is a potential alternative to “gamification”.

• Hope researchers to move into more detailed study.