

# Gamification: Dynamic Personalization of Gameful Interactive Systems



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**Gamification**, the application of game elements in non-game contexts, can improve user engagement, enjoyment, and behaviour toward digital interactive systems. Existing research suggests that the qualities of users, such as their personality, preferences, or identification with the task, can influence how they use a gameful systems. Given how user qualities shape the gameful experience, we theorize that it is advantageous to personalize gameful systems. We propose a method for personalized gameful design with three steps: (1) classification of user preferences, (2) selection of gameful design elements, and (3) heuristic evaluation of the design. Our method provides practical tools and clear guidelines to help designers effectively build personalized gameful systems. We designed, implemented, and conducted a pilot evaluation of a software platform that allows researchers to generate different experimental conditions for the study of personalized gameful design. This way, different research questions can be answered by gamification researchers.

**Interesting fact:** The Gamification User Types Hexad Scale, which we helped develop as a practical method for classification of user preferences, has already been answered by more than 22,000 internet users and has been cited more than 100 times in scholarly publications as of July 2019.