Chapter V

Learning While Playing:
Design Implications for Edutainment Games

Kalle Jegers
Umeå University, Sweden

Charlotte Wiberg
Umeå University, Sweden

Abstract

This chapter reports on the initial results of a study conducted in the project FunTain. The main purpose was to identify general guidelines/implications for edutainment games, in order to guide designers of such games as they often lack in design guidelines. Usability evaluations were conducted on an edutainment game in order to find usability problems. These findings were analyzed and used as input in focus group meetings, held with joint teams of game designers and HCI experts. The outcome of the focus groups was a proposal of a list of ten general design guidelines. Findings indicate that users had problems in understanding the underlying model for the game as well as identifying the knowledge related content. Experts, further, gave comments about feedback problems and different
types of consistencies. Some of the implications from the findings are guidelines for earning and loosing points, scoring and performance feedback and game object characteristics.

Introduction

Currently, both research and practice show a great interest in studying and developing ways to use computers in various forms to support and enhance interaction between humans. Although the issue of human-to-human interaction by use of computers is of great relevance and importance, we still must not forget about the interaction between humans and computers. New factors and aspects, not previously grasped by the Human Computer Interaction (HCI) discipline, are becoming recognized as important in the interaction between users and technology. Aspects such as emotions, experiences and entertainment are more and more frequently considered when designing and developing new computer applications in many different areas.

Entertaining experiences is one of these new aspects that today are becoming in focus not only in traditional areas of entertainment, but are currently used in previously non-entertaining contexts as a mean to improve products and user/consumer experiences. Examples of this could be found both in the physical world (i.e., restaurants and theme parks) but also in computer contexts such as on the World Wide Web and in different kinds of software (Pine II & Gilmore, 1999; Wolf, 1999). The application of entertainment in previously non-entertaining environments and contexts opens up new research questions, as entertainment is applied and used with purposes beyond creating plain amusement and fun for the user. One of the areas where entertainment is applied with purposes beyond just creating an amusing experience is the area of edutainment, where entertainment is used in combination with education in order to create a motivating and successful environment for learning.

Adams et al. (1996) describe edutainment as a blend of education and entertainment, pursued in multimedia software. The description, or definition, indicates that the two major dimensions of importance in edutainment is some kind of pedagogy (education) and some kind of “fun” or entertaining experience (entertainment). Edutainment is therefore one example where research on new appliances of entertainment in previously non-entertainment contexts may be conducted.
Related Content

The State of People and Knowledge in the GCC Countries per a New Index and the Future Ahead

Performing Charlotte: A Technique to Bridge Cultures in Participatory Design
Ann Light, Dorothea Kleine, Royal Holloway and Macarena Vivent (2010). International Journal of Sociotechnology and Knowledge Development (pp. 36-58).
www.igi-global.com/article/performing-charlotte-technique-bridge-cultures/39094?camid=4v1a
The Implementation of Knowledge Management in Service Businesses
[www.igi-global.com/chapter/implementation-knowledge-management-service-businesses/52218?camid=4v1a](www.igi-global.com/chapter/implementation-knowledge-management-service-businesses/52218?camid=4v1a)

The Information Architecture of the Universe
[www.igi-global.com/chapter/information-architecture-universe/23602?camid=4v1a](www.igi-global.com/chapter/information-architecture-universe/23602?camid=4v1a)