Entertainment Software Accessibility: 
Introduction to the Special Thematic Session

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This year will see the fifth edition of this Special Thematic Session. In ten years we have seen the growing awareness of game accessibility in our community of people who aim at helping other people with digital devices, and in the same time in the community of games designers. But this is not enough. Indeed in the real market there is about no accessible game in the blockbusters. For readers interested in this topic, more information can be found in [3], an extensive State-of-the-Art paper about Computer Games and Visually Impaired People.

Games are important in the early development of children. Computer games can provide a lot of benefits to children with special needs. Actually they are the ones who need technology the more dramatically. There are at least two reasons to that. First computer allow a high adaptability to the actual user. One of the greatest feature is the very high level of rewarding effect. One can set up a system which will detect the slightest action from the user and turn it into lots of visual and/or audio effects. Phil Ellis showed a very nice example in [5]: music was created by children with very heavy handicap using to motion detectors. For children who need help with very structured framework, the game can be a good tool which always reacts in a predictable way. The second reason is that this group of people can benefit a lot of technological aids and becoming familiar with them at an early stage is a very important training for their future.

Then we see 2 big categories of accessible games: specific games dedicated to children with special needs, providing some special features well adapted to educate or entertain these children, and accessible mainstream games, which can be used directly or with a specific interface. The first category seems more simple. Here we want games which fulfil a very specific need. In the first session of this STS, in 2002, Anita Hildén was pointing an important idea: “...focus on opportunities and possibilities for young disabled children instead of disabilities” [7]. We have seen several examples in past sessions, for instance [12,11,10,11].

The second category is very important too. [B] reminds us the The Convention on the Rights of the Child recognising the right of the child to rest, leisure, play and participate in cultural life and the arts (see the full citation in the paper). In addition serious games are taking more and more importance in various parts of the society (simulation, training, etc), and game-like interfaces as well [8]. In this session [A] will discuss interfaces issues about serious games for students with intellectual disability.

Various studies about accessibility have been reported, like for instance [9,4]. Showing the growing awareness of this issue in the community of games...
developers, the IGDA\footnote{International Game Developers Association.} have published a *Game Accessibility White Paper*. In this session [B] shows a pilot study about a game for PlayStation and, based on a case study, [C] proposes an interesting discussion about why accessibility is not taken into account and new ways, to maybe bringing accessibility to the mainstream. [D] proposes also an interesting study about improving efficiency of captioning videos for deaf and hard of hearing people.

To achieve accessibility of mainstream games there is a tremendous need of various research on alternative ways of performing game interaction, like for instance [6]. [E] proposes a new interface for board games, dedicated to visually impaired people.

All these researches are very interesting and create a lot of opportunities for designing games that are accessible for people with special needs, but the next break-through, necessary to achieve real accessibility of mainstream games, and also to improve the design of specific games, is a standard interface that would be implemented by mainstream games developers to allow specific interfaces to command these games [2]. This is a vast research topic but funding is still missing. Let’s hope that the near future will at least give us opportunities to carry on projects in this direction.

References to Entertainment Software Accessibility Session

A. Sik Lányi, C., Brown, D., Standen, P., Lewis, J., Butkute, V.: User interface evaluation of serious games for students with intellectual disability

B. Elena, L., Bulgheroni, M., Serenella, B.: Making mainstreaming videogames more accessible: a pilot study applied to Buzz!TM Junior Monster Bluster for PlayStation

C. Ossmann, R., Miesenberger, K.: Accessibility of a Social Network Game

D. Vy, Q., Fels, D.: Using Names and Location for Speaker Identification in Captioning


References
