Storytelling Meets the Social Web: An HTML5 Cross-Platform Application for Older Adults

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Abstract. This demonstration presents a storytelling application specifically designed for older adults to share stories and thoughts. Studies claim that older adults commonly have difficulties in engaging with on-line social networks [1], but increased social inclusion and sense of well-being has been observed in those who engage [2]. While following a user-centered design approach, we have developed an HTML5 device-independent and intuitive social web application which addresses older adults' specific needs and age-related impairments, allowing them to connect to their friends and family through storytelling.

Keywords: Storytelling, Online Social Networks, User-Centered Design, Older Adults, HTML5.

1 Introduction

Unlike a few decades ago, today's households no longer have more than two generations [4], resulting in older adults living by themselves. Distance from family can result in feelings of loneliness and can limit their ability for sharing their legacy, something which is paramount for them. Furthermore, transportation and communication problems are known constraints due to the decline of their physical and mental conditions, resulting in a general decline of their well-being and happiness [1]. While they can be positively influenced by the use of online social networks [2], younger people are the mainstream audience of these services [3]. Feature-rich services and web pages with large amounts of information are common and difficult to use by those lacking computer skills; this results in a general inhibition towards the exploration of technology from the elderly. To address these problems and to fight the social exclusion of older adults, we developed a prototype of a storytelling applicationthat leverages an existing onlinesocial network (Facebook) for connecting older adults with their relatives.

2 Cross-Platform Storytelling on the Social Web

2.1 Application Design

The prototype application was implemented using a set of novel web technologies commonly denominated as HTML5, taking into account special design constraints

P. Campos et al. (Eds.): INTERACT 2011, Part IV, LNCS 6949, pp. 364–365, 2011.

identified through user-centered design, which highlighted common impairments and difficulties of older adults' interaction. Several observations and usability tests were pursued with a sample of 15 older adults to inform the design. We have used the test results to accommodate a small learning curve, as well as a pleasant experience for any older adult user. Those studies provided us with our main goals which were to enable text and image sharing, as well as to allow follow-up comments on them. The inclusion of meta-data in each story (for example the user's mood or location) appeared as interesting, but secondary.

2.2 Prototype Implementation

The implementation of this storytelling application followed a user-centered design approach, in order to create an easy to adopt application by senior users. This demonstration aims at showing how the application enables older adults to share stories through online social networks, specifically Facebook. Our target users consist of older adults without any prior experience with information and communication technologies. As such, the client application only provides access to a small subset of all Facebook's features, those identified as the most relevant for the older adults, while also keeping the application easy to use. Despite primarily aiming at older adults, any individual with a Facebook account will be able to use the storytelling application as well as to interact with story-tellers through the Facebook service itself. The prototype uses elements from the recent HTML5 specification, such as localStorage for keeping local data. This guarantees seamless portability between compatible browsers, enabling the user to choose her preferred device to use the application.

3 Conclusions and Future Work

Our application provides an alternative communication channel between olderadults and their friends and family, hoping to increase their well-being throughthe elimination of feelings of loneliness.

Due to the fast-paced evolution of the HTML5 standard, extra features mightbe included in the project before the date of the demonstration. While sharingtext and images are the initial features, video and audio capture should also beintegrated into the application as soon as they are available in web browsers(already described in the current HTML5 specification).

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