Chapter 3.18
Improving the User Experience of a Mobile Photo Gallery by Supporting Social Interaction

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ABSTRACT

Today, image gallery applications on mobile devices tend to be stand-alone and offline. For people who want to share photos with others, many add-on tools have been developed to connect the gallery applications to Internet services to enable photo-sharing. The authors argue that photo-centric social interaction is best supported when the gallery application is fully integrated with an Internet service. In this case, no additional tools are needed and the user’s image content is fully synchronized with the service. They designed and implemented a service-integrated mobile gallery application with a corresponding Internet service. Moreover, they conducted a field study with 10 participants to compare our application with a state-of-the-art gallery application combined with an add-on photo-sharing tool. Their application was preferred by most participants and it was especially appreciated because of the user experience. Above all, the results show that social activity increased amongst the participants while using our application.

INTRODUCTION

People are starting to use their mobile devices as their primary cameras because the quality of mobile cameras is improving (Nokia, 2008). As most mobile devices are also capable of connecting to the Internet, they can be used to publish photos to photo sharing Internet services and also browse and comment the photos hosted by those services. However, photo sharing on mobile devices still tends to be a laborious task and on that account users might not be able to share their mobile photos at all.

Nowadays, users are able to share their photos on their mobile devices by using applications that are essentially upload tools for certain Internet services.
Improving the User Experience of a Mobile Photo Gallery by Supporting Social Interaction

In this article, we introduce a mobile gallery application that aims at offering great user experience by being fully integrated to a corresponding Internet service. The application provides an easy and fun way for users to share and interact with photos in real-time. We tested the application in a field study of 1+1 weeks (a test period of 1 week for each application) by comparing it to a state-of-the-art mobile image gallery application combined with an Internet service upload tool. The goal was to investigate whether the social interaction is best encouraged when users are using a mobile service-integrated gallery application compared to state-of-the-art applications and tools existing on the market today.

RELATED RESEARCH

Mobile image sharing has been an important topic in the research literature. Many imaging applications have been developed around the topic of mobile image management and sharing process, but we are not aware of any research on seamlessly integrating personal image management and photo sharing between a mobile device and a corresponding Internet service and how that would affect the user experience and social interaction. Instead, the previous research on mobile imaging applications can be divided into two groups: studies on the usage and management of personal images and studies on sharing images. The studies on personal images have revealed many ways to help users to organize and locate their photos (Ames & Naaman, 2007; Bentley et al., 2006; Frohlich et al., 2002; Gurrin et al., 2005; Jacucci et al., 2006; Naaman et al., 2004; Wilhelm et al., 2004). They have also shown how to enable image browsing (Harada et al., 2004; Khella & Bederson, 2004; Pauty et al., 2005; Wang et al., 2003) or displaying (Liu et al., 2003) in an effective way on a mobile device in terms of user’s personal image collection. The research on mobile image sharing has been focusing on how to improve the...