

5th Workshop on Software and Usability Engineering Cross-Pollination: Patterns, Usability and User Experience

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Abstract. The workshop focuses on how process models, methods and knowledge from the area of Human-Computer Interaction can be integrated and adopted to support and enhance traditional software engineering processes. In its 5th edition this workshop will investigate the application of usability engineering methods that are adapted to fit the evaluation of advanced interfaces and how usability and user experience evaluation methods can be incorporated to support design decisions and changes in standard software development. This workshop is organized by the IFIP working group 13.2 "Methodologies for User-Centered Systems Design".

Keywords: Software Engineering, Usability, User Experience, Cross-pollination, Patterns.

1 Introduction

Software engineering and usability engineering are affected by a mutual influence that we call "cross-pollination". Examples are task specifications, design patterns and life cycle models. These examples were invented in one field and later on adapted in a new context. Use cases [5] and Usability pattern languages [7] are only two out of many examples. New developments in intelligent and adaptive environments and mobile computing require new solutions, for usability evaluation methods [3] and especially for user experience evaluation [1]. The key attribute of user interfaces is that they need to adapt to time, location and usage which makes them very difficult to evaluate using standard techniques [2].

The workshop will focus on how to integrate and extend traditional development and evaluation methods in order get user interfaces that are usable and ensure good user experience. Additionally, it should be possible to optimally evaluate the usability of advanced interfaces in their specific context of use [4, 6]. Experts in HCI, software

and usability engineering need to learn from each other to facilitate and encourage this convergence.

The workshop aims to be a forum for sharing ideas about potential and innovative ways to cross-pollinate the expertise among the different communities and to show examples, which can stimulate industrial software development. Additionally it should provide a forum that will help to grow a community of interest in this area.

2 Structure of the workshop

The goals of this workshop are to provide HCI specialists, software engineers and usability specialists from industry and research institutions the opportunity to discuss both the state-of-the-art and the cutting edge practice in usability and user experience evaluation. Topics of interest include, but are not limited to, the usability and user experience evaluation of advanced interfaces and interactive systems like adaptive interfaces, context-aware interfaces, human-robot interfaces or mobile interfaces and the integration of these methods in the respective application domains. Additionally, reports about the application of patterns in the different fields of HCI like [7] are welcomed.

The workshop is the official workshop of IFIP working group 13.2 "Methodologies for User-Centered Systems Design". http://wwwswt.informatik.uni-rostock.de/IFIP_13_2/. It expects HCI specialists, software and usability engineers from academia and industry as participants.

This workshop is planned for one full day including the following activities of an invited talk, papers presentations and a round table discussion. Participants have to prepare a position paper of 4 to 10 pages which will be reviewed by an international committee. Selected papers will be published on the workshop web site (<http://CEUR-WS.org>.) and will be presented during the workshop. The outcome of the workshop will be a white paper presented on the web site of the workshop.

References

1. Bernhaupt, R. (Ed.) (2010). Evaluating User Experience in Games: Concepts and Methods. London: Springer.
2. Brusilovsky, P., C. Karagiannidis, and D. Sampson. The Benefits of Layered Evaluation of Adaptive Applications and Services. in Eighth International Conference on User Modelling (UM 2001). 2001. Freiburg, Germany.
3. Chin, D.N., Empirical Evaluation of User Models and User-Adapted Systems. User Modelling and User Adapted Interaction, 2001(11): p. 181-194.
4. Gena, C., Methods and Techniques for the Evaluation of User-Adaptive Systems. The Knowledge Engineering Review, 2005. 20(1): p. 1-37.
5. Jacobson, I., Object- Oriented Software Engineering. A Use Case Driven Approach, Addison Wesley, 1992
6. Kjeldskov, J. and C. Graham. A Review of Mobile HCI Research Methods. in Mobile HCI 2003 (Lecture Notes in Computer Science 2795). 2003. Udine, Italy: Springer-Verlag.
7. Winkler, M., Bernhaupt, R., Pontico, F. (2010) Challenges for the development of user interface pattern languages: A case study on the e-Government domain, IADIS International Journal on WWW/Internet, Vol. 8, No. 2, pp. 59-84.