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BOOK REVIEWS

Review of books in the area of User Interface Design

User interface design or user interface engineering is the design of computers, mobile communication devices, software applications, websites with the focus on the user's experience and interaction. The goal of user interface design is to improve users experience with simplicity and efficiency while keeping the design ergonomically sound. In literature this phenomenon is known as "User Centered Design". The term user friendly is often used as a synonym for usability which denotes the ease with which people can employ a particular tool or other human-made object in order to achieve a particular goal.

The key benefits of usability are increased user efficiency and productivity, reduced development costs and most importantly increased customer satisfaction. The improved interface would also tend to lower the time needed to perform necessary tasks. Usability is now recognized as an important software quality attribute, earning its place among more traditional attributes such as performance and robustness. Indeed, various academic programs in Information technology and software development around the globe focus on usability design and engineering.

Here we review recently published popular books in the area of User Interface Design.

Helen Sharp, Yvonne Rogers and Jenny Preece, Interaction Design: Beyond Human-Computer Interaction, Publisher: Wiley; 2 edition (March 23, 2007), ISBN-13: 978-0470018668

Beyond Interaction Design is an important book for designing effective and capable interfaces to software applications. The book provides a comprehensive

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look at the entire set of requirements involved with design. The authors show that there is much more to systems design than end-user requirements and CGI scripts. Effective HCI is a multi-disciplinary area including psychology, sociology, anthropology, information systems, and computer science. The book notes that there has never been a greater need for interactions designers and usability engineers to develop current and next-generation interaction technologies. To be successful in the interface design game, programmers need a mixed set of skills, which is not an easy task.

Interaction Design comprises 15 densely packed chapters that integrate all of the various cognitive, social, and other issues that are germane to interaction design. Chapter 1 provides an overview of what makes for good and bad designs. Chapter 3 gets into the psychological aspect of HCI and looks at cognition and how users interact with the systems they implement. None of the books makes for easy reading, as the topics at hand are often multifaceted and complex. Chapter 6 deals with the process of interaction design and for the most part ends the psychological approach, while Chapters 7 through 10 deal with the actual design of the system. The book has a number of real-world case studies, and also includes interviews with various authorities on HCI.

Ben Shneiderman, Catherine Plaisant, Maxine Cohen, Steven Jacobs, Designing the User Interface: Strategies for Effective Human-Computer Interaction - 5th edition, Publisher: Pearson /Addison Wesley 5th edition (2009), ISBN: 0-321-26978-0

Designing the User Interface: Strategies for Effective Human-Computer Interaction provides a comprehensive introduction to the dynamic field of human-computer interaction (HCI). An expanded author team brings unparalleled industry and academic experience to this latest edition. Practical techniques, research-supported design guidelines, and a multitude of current examples and figures illustrate good design principles and practices, effectively guiding readers through their first HCI design projects.

Covering just about every major HCI topic, from basic usability and design processes to design for mobile and social environments, this book offers a very broad summary of the field. It also introduces more advanced topics, such as search interfaces and information visualization among others giving readers entry points into important trends.

Steven Heim, The Resonant Interface: HCI Foundations for Interaction Design, Publisher: Pearson /Addison Wesley (January 1, 2008), ISBN: 978-0-321-37596-4

In an age of ubiquitous computing it is essential that Interaction Design be based on the rich foundation of HCI research and knowledge. The Resonant Interface does that and more. It moves beyond the traditional scope of human-computer interaction (HCI) and is based on the concept of active learning that

integrates theory and practice. The author reasons for using design standards and the detailed consequences of poor design are backed up by research. He gives specific recommendations for standards, such as typefaces, point size, label and caption styles. He explains and uses good short hand throughout the book for items as ''signal'' versus ''noise.'' This is handy to quickly distinguish between things that are good/favorable/communicative/useful compared to things that are interfering/obstructive/not useful. This is an excellent book for anyone wanting to understand the ''why'' of good screen design and then learn the ''what.''

Laura Leventhal, Julie Barnes, Usability Engineering: Process, Products & Examples, Publisher: Prentice Hall; 1 edition (May 3, 2007), ISBN-13: 978-0131570085

This comprehensive introduction to usability engineering takes a project-based approach to the development process. The book provides detailed coverage of the fundamentals without unnecessary depth or breadth, focusing readers on understanding the goals and processes of usability engineering. It also covers the entire usability engineering lifecycle, emphasizing select techniques and methodologies; illustrates the user interface development process with examples from a medium-scale development example.

Each chapter's introduction describes key design concepts that are often misunderstood, such as affordances, visual hierarchy, navigational distance, and the use of color. These give a deeper understanding of why the patterns work, and how to apply them with more insight.

Matt Jones, Gary Marsden, Mobile Interaction Design, Publisher: Wiley (February 10, 2006), ISBN-13: 978-0470090893

Mobile Interaction Design concentrates on developing interfaces and devices with a great deal of sensitivity to human needs, desires and capabilities. The book presents key interaction design ideas and successes in an accessible, relevant way. It provides ideals and techniques which will enable designers to create the next generation of effective mobile applications. Critiques current mobile interaction design (bloopers) to help designers avoid pitfalls. Design challenges and worked examples are given to reinforce ideas. Also it discusses the new applications and gadgets requiring knowledgeable and inspired thinking about usability and design. The book has informal case studies of actual product design methods used by Nokia, HP and other companies.

Barbara Ballard, Designing the Mobile User Experience, Publisher: Wiley (April 16, 2007), ISBN-13: 978-0470033616

Designing the Mobile User Experience provides the experienced product development professional with an understanding of the users, technologies, devices,

design principles, techniques and industry players unique to the mobile and wireless space. The author describes the different components affecting the user experience and principles applicable to the mobile environment, enabling the reader to choose effective technologies, platforms, and devices, plan appropriate application features, apply pervasive design patterns, and choose and apply appropriate research techniques. This book also provides WAP design advice and detailed advice for FlashLite, UIOne, SVG, tat, Java, and other environments.

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