Abstract

Software usability of software system specified how much user feels comfort and attract towards specific system environment, on the other hand Software designing is also an important factor affecting software system success. Usability is not a function of time although researchers have come up with various models and matrices relating these two concepts. It is very important quality attribute of software system. The success and failure of system in economic manner depends on the software usability, which is directly related to software design. This survey paper discusses on various aspects of designing and their effect on usability of system. Measurement in software is still in its initial stage and it has been found that modern day software's have become so complex that it directly affects the software usability. In this survey paper also discuss about various impacts that occur on usability due to software design complexity and discussed various methodologies and previous work related to design complexity and Usability separately as well as together, so that it will become easily analyze impact of software design on software usability.

References
- Akaikine, A. , "Impact Of Software Design Product On Maintenance Cost And
  Measurement O Economic Profits Of Product Redesign", Massachusetts Institute of
  Technology( MIT) June 2010.
- Basili, V. R. Qualitative software complexity models: A Summary. In "Tutorial
  on Models and Methods for Software Management and Engineering"; IEEE
- Bass, Len; Clements, P. , Rick Kazman (2012). "Software Architecture In
- Cataldo M., Cleidson R. B., Souza, David L. B., Miranda T. C., Nambiar, S.
  "The Impact of Interface Complexity on Failures: an Empirical Analysis and
  Implications for Tool Design"; January 2010 CMU-ISR-10-100.
- Chen, Y., "Defining Usability: How Library Practice Differs from Published
  Research";
- Clements, Paul, Felix Bachmann, Len Bass, David Garlan, James Ivers, Reed Little,
  Paulo Merson, Robert Nord, Judith Stafford (2010). Documenting Software Architectures:
- Dubey, S. K. and Rana, A. "Analytical roadmap to usability definitions and
  decompositions"; / International Journal of Engineering Science and Technology
- Dubey, S. K. "survey on impact of software metrics on software quality";
  1, 2012.
- Dubey, S. K. and Rana, A. "A comprehensive assessment of object-oriented
  17, April 2012.
- Joseph K. Kearney, Robert L. sedlmeyer, william b. thompson, michael a. gray,
  and michael a. adler "Software complexity measurement"; ACM
  Applications.
- Bias & D. Mayhew (Eds. ), Cost Justifying Usability (2nd edition).
- Briand, L., Wüst J., Daly, J., and Victor Porter, D. "Exploring the relationships
  between design measures and software quality in object-oriented systems," Journal of
- Nielsen, J. Alertbox "Introduction to Usability". Retrieved 2010-06-01
- Juristo, N. Moreno A. M. Maria-Isabel Sanchez-Segura "Analysing the impact of
  usability on software design The Journal of Systems and Software"; 80 (2007) 1506–1516,
  2007.
- MacCormack, A., Rusnak, J. Baldwin, C. "Exploring the Structure of Complex
Impact of Software Design Aspects on Usability

- Richards, K., "Agile Project Management: Integrating DSDM Atern into an existing PRINCE2™ environment" White Paper March 2010
- Situated Research "Incorporating Usability Experts with Your Software Development Lifecycle: Benefits and ROI" info@situatedresearch.com

Index Terms

Computer Science  Software Engineering

Keywords

Usability  Software Design Complexity  Human Computer Interaction  Maintainability