Chapter IX
Specification of the Context of Use for the Development of Web-Based Applications

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ABSTRACT

This chapter presents the structure of an index which serves as support so allowing the development team to create the specification of the context of use document for the development of Web applications, bearing in mind characteristics of usability and accessibility, each point of the index being explained in detail. A correct preparation of this document ensures the quality of the developed Web applications. The international rules and standards related to the identification of the context of use have been taken into account. Also, the functionality limitations (sensorial, physical, or cognitive) which affect access to the Web are described, as well as the technological environment used by disabled people (assistive technologies or alternative browsers) to facilitate their access to the Web content. Therefore, following the developed specification of the context of use, usable and accessible Web applications with their corresponding benefits can be created.
INTRODUCTION

ISO (International Organization for Standardization) defines usability in the document “ISO 9241-11” (ISO, 1998) as “the extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use.”

On the other hand, the international standard “ISO/IEC 9126-1” (ISO, 2001a) employs the term “quality in use” to indicate “the capability of the software product to enable specified users to achieve specified goals with effectiveness, productivity, safety, and satisfaction in specified contexts of use.”

Also included within the international standard “ISO 13407” (ISO, 1999) as one of the four activities of human-centred design is to understand and specify the context of use.

Lastly, the standard “ISO/TS 16071” (ISO, 2003) defines accessibility in relation to usability as “the usability of a product, service, environment, or facility by people with the widest range of capabilities.”

Therefore, in order to ensure the quality of Web sites, it is necessary that they comply with a series of characteristics of usability, with the identification of the context of use being paramount. The details of the characteristics of the users, their objectives and tasks as well as the environment within which they carry out their tasks, provide important information which is necessary in order to be able to correctly identify all the requirements of the product and, in particular, the requirements related to usability and accessibility.

There are standard published guidelines related to general usability (see Usability Standards in Figure 1), as well as general accessibility (see accessibility standards in Figure 1) and specific to Web-based applications accessibility (see W3C-World Wide Web Consortium- Guidelines in Figure 1), but there are no guidelines that unify usability and accessibility features. Furthermore, some standards specify a great number of rules to...
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