The primary goal of this paper is to investigate various elements of website and evaluate quality of website design. The quality of website depends on various components such as download time, website size, broken links and website structure. The quality of website structure is based on its navigability, average number of clicks and structural complexity. Different kinds of tools are used to examine the components of website. These tools include: W3C Link Checker, W3C Markup Validation Service, Webpage Analyzer and Website Extractor. The W3C Link checker accepts URL address of Web page and parses each and every hyperlink to find broken links in the page. The W3C Markup Validation Service finds the errors regarding HTML tags', usage errors, properties of Web page and standards of the Web page mentioned by W3C Consortium. The errors of each web site are grouped into major and minor errors. A set of qualitative measures are identified based on these errors. The web tool PowerMapper is used to establish the sitemap for the website and path length metric is used to evaluate average number of clicks to get desired web page and web site structural complexity is determined with cyclomatic complexity. The quality of website design is measured in 10-point scale and the value suggests the improvement of the site design.
A Qualitative and Quantitative Frame Work for effective Website Design

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Index Terms

Computer Science  Software Engineering
**Key words**

- major errors
- minor errors
- qualitative measures
- website structure and navigability