Challenges and Issues in Adapting Web Contents on Small Screen Devices

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In general, Web pages are intended for large screen devices using HTML technology. Admittance of such Web pages on Small Screen Device’s (SSD’s) like mobile phones, palmtops, tablets, PDA etc., is increasing with the support of the current wireless technologies. However, SSD’s have limited screen size, memory capacity and bandwidth, which makes accessing the Website on SSD’s extremely difficult. There are many approaches have been proposed in literature to regenerate HTML Web pages suitable for browsing on SSD’s. These proposed methods involve segment the Web page based on its semantic structure, followed by noise removal based on block features and to utilize the hierarchy of the content element to regenerate a page suitable for Small Screen Devices. But World Wide Web consortium stated that, HTML does not provide a better description of semantic structure of the web page contents. To overcome this draw backs, Web developers started to develop Web page(s) using new technologies like XML, Flash etc.. It makes a way for new research methods. Therefore, we require an approach to reconstruct these Web pages suitable for SSD’s. However, existing approaches in literature do not perform well for Web pages erected using XML and Flash. In this paper, we have emphasized a few issues of the existing approaches on XML, Flash Datasets and propose an approach that performs better on data set comprising of Flash Web pages.

1. INTRODUCTION

The rapid expansion of internet has made Web a popular place for dissemination of information and also provided avenues for research in various fields related to the web. In last few decades, research on Web is increasing at rapid rate. For example, improving the quality of Web by Analyzing Usability Test, Web Information Extraction, Tracking Product Opinions, and analyzing user reviews, Browsing Web on SSD’s. In general it is called as Web Mining.

According to analysis targets [1], Web mining is divided into three different types namely Web Usage Mining, Web Structure Mining and Web Content Mining. Web usage mining is the process of determining the patterns of users on the internet. It describes how a page is accessed, date and time, the page was accessed, IP address of the browser and page references etc. [2][3]. Web Structure Mining is the process of using graph theory to analyze the node and connection structure of the Web site. Web Structure Mining can be divided into two kinds; extracting patterns from hyperlinks in the Web, a hyperlink is a structural component that connects the Web page to a different location, and mining the document structure, analysis of the tree link structure of page structures to describe HTML or XML tag pages [4]. Web Content Mining aims in extracting useful information or knowledge from Web page content [5].

Currently surfing the Web on SSD’s such as Mobile phones, Personal Digital Assistants (PDA) etc., is becoming very popular. Delivering Web pages to SSD’s have become possible with the advanced wireless technology.
the better performance level based on response time and content coverage analysis.

REFERENCES
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Figure 11. Feasibility Analysis on Existing System.
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Figure 12. Existing system Feasibility Analysis on our Data set.

Figure 13. Response Time Analysis on Various SSDs.

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17. Yin X and Lee W S. Using Link Analysis to Improve Layout on Mobile Devices, in 13th
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Figure 14. Content Coverage Analysis on Various SSDs.


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