Personal Web Revisitation by Context and Content Keywords with Relevance Feedback

Abstract:

A web page can be localized by a fixed url, and displays the page content as time-varying snapshot. Among the common web behaviors, web revisitation is to re-find the previously viewed web pages, not only the page url, but also the page snapshot at that access timestamp. A 6-week user study with 23 participants showed nearly 58% of web access belonged to web revisitation. Another 1-year user study involving 114 participants revealed around 40% of queries were re-finding requests. According to on average, every second page loaded was already visited before by the same user, and the ratio of revisited pages among all visits ranges between 20% and 72%.

Existing System:

We present a personal web revisitation technique, called WebPagePrev, that allows users to get back to their previously focused pages through access context and page content keywords. Underlying techniques for context and content memories’ acquisition, storage, and utilization for web page recall are discussed. Dynamic tuning strategies to tailor to individual’s memorization strength and recall habits based on relevance feedback (e.g., weight preference calculation, decay rate adjustment, etc.) are developed for performance improvement. We evaluate the effectiveness of the proposed technique WebPagePrev, and report the findings (e.g., the importance of context and content factors) in web revisitation through a 6-month user study with 21 participants.

Proposed System:

This paper presents a personal web revisitation technique based on context and content keywords. Context instances and page content are respectively organized as probabilistic context trees and probabilistic term lists, which dynamically evolve by degradation and reinforcement with relevance feedback. Our experimental results demonstrate the effectiveness and
applicability of the proposed technique. Our future work includes 1) prediction of users’ revisitation 2) extending the technique to support users’ ambiguous re-finding requests, and 3) incorporating social context factors in information re-finding.

Modules:
- Web revisitation by context and content keywords.
- Preparation for web revisitation.

SYSTEM REQUIREMENTS

H/W System Configuration:

- Processor: Pentium –III
- RAM: 256 MB (min)
- Hard Disk: 20 GB
- Key Board: Standard Windows Keyboard
- Mouse: Two or Three Button Mouse
- Monitor: SVGA

S/W System Configuration:

- Application Server: Tomcat5.0/6.X
- Front End: HTML, Jsp
- Scripts: JavaScript.
- Server side Script: Java Server Pages.
- Database: MySQL 5.0
- Database Connectivity: JDBC