Abstract

At present de-facto standard for providing contents in the Internet is the World Wide Web, which implements the client server technique. A technology, which is now emerging on the web, is searching for the audio, video and images and retrieval of the same. In this paper, we describe an architecture that helps the user in performing the above tasks using mobile agents. Here the system is designed and implemented for the search and retrieval of the images and audio files over the Internet. We can observe that several disadvantages of the World Wide Web’s client server technology have been overcome by using this architecture. The current commercial applet – based methodologies for accessing audio files from web databases offers limited flexibility, scalability and robustness. Our system is based on aglets which are nothing but Java based mobile agents. The implementation of the architecture shows that its performance is comparable to and in some cases outperforms the current approach. As an application on this architecture we have also created the speech synthesizer Agent for the special purpose of playing an audio from a particular word. To achieve this, we are making use of open source software Free Text to Speech converter1.0.1 as a supporting tool. This architecture makes use of pull model of E-commerce. This work aims at saving the download time, reduces network traffic for the users who compare and purchase audio online.

Reference

1. P. Dasgupta, N Narasimhan, L. Moser, and P. M. Mellier Smith, "MAgNET: Mobile Agents for Networked Electronic Trading", IEEE Transactions on Knowledge and Data Engineering, Special Issue on Web Technologies Vol. 24, No.6, July/August 1999, pp 509-525
Mobile Agents for Audio Search & Retrieval

2. IBM Agents, Mobile Java™ Agents with Aglets™, by Christian Weigel, Department of Computer Science, University of Applied Sciences Kaiserslautern, Amerikastr. 1, 66482 Zweibrücken, Germany, cweigel@gmx.net - http://www.christianweigel.com/
3. Mobile Agents: What about Them? Did They Deliver what They Promised? Are They Here to Stay?, by George Samaras, Department of Computer Science, University of Cyprus, CY-1678 Nicosia, Cyprus, cssamara@cs.ucy.ac.cy
4. MOBILE AGENTS FOR CONTENT-BASED WWW
5. DISTRIBUTED IMAGE RETRIEVAL, by Sabu M Thampi1, Dr. K. Chandra Sekaran2
6. Digital Watermark Mobile Agents*, by Jian Zhao and Chenghui Luo
8. Cloud Garden’s Java Speech API, December 3 2002. URL: http://www.cloudgarden.com/JSAPI/, 321 South Main Street, Providence, RI 02903
24. Performance Enhancement of E-Commerce Applications using Multiple Mobile Agents

Index Terms
Mobile Agents for Audio Search & Retrieval

Computer Science

Information Systems

Key words

CBSR

Audio Aglet

Information Systems