AHA: an Adaptive Hypermedia Architecture

Hongjing Wu, Geert-Jan Houben, Paul De Bra
Department of Mathematics and Computing Science
Eindhoven University of Technology
PO Box 513, 5600 MB Eindhoven
The Netherlands
Email: {hongjing, houben, debra}@win.tue.nl

Abstract: Since 1996 we have been developing an adaptive hypermedia architecture, called AHA. Based on our experience with AHA we have defined a reference model, called AHAM (and presented at the ACM Hypertext’99 conference). The main aim of this model is to develop a framework to aid the development of adaptive hypermedia systems in which authoring will be much easier than in existing systems. A full paper at ED-MEDIA’99 describes authoring support for AHAM-based adaptive system. This demonstration shows different applications of the AHA system. It shows how a single adaptive hypermedia engine can be used in different application areas, including courseware and on-line (“kiosk”) information systems. It illustrates the need for better authoring support. It shows how the separation of the conceptual part and the content part of the domain model is (partly) realized in AHA. It also shows that the user-model is implemented in a way that enables other applications to interact with AHA through the user-model. A concern for adaptive hypermedia is that the dynamic generation or filtering of the information and the maintenance of the user model might result in unacceptably slow Web-based systems. The demonstration of AHA shows that, through the use of Servlet-technology, adaptive applications can be built without any noticeable performance degradation.