

## **An extension of UML modeling for web hypermedia design: a case study**

### **ABSTRACT**

It is obvious that the design efforts taken in modeling web hypermedia application are significantly different to basic web information systems. The designs should emphasis on domain structure, complex processes and interactions, functions and operations, hyperlinks structure, and logical abstract presentation designs. This paper present and discuss the design of a web hypermedia application ó a case study, called SLEX-Web application. It is a web hypermedia application of a faculty in university environment that offers general information and learning application to its users. The existence of complex processes and interactions are highlighted and taken as examples to present some of complexity issues arise in the design efforts. The main objective is to describe how those processes and interactions should be treated, modeled, and translated into user interface elements through the major design processes. A systematic UML-based design method, called Com+HDM is used as the medium of design approach and notations. Finally, this paper will summarize the design efforts by giving some arguments, lessons learned, and conclusions at the end of the paper.

**Keyword:** Web hypermedia application; Design processes; UML notations; Navigation; Interaction; User interface elements