Organizing Web Sites with Architectural Metaphors

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Keywords: virtual reality, virtual worlds, architectural metaphors, Web site design, spatial navigation, spatial orientation, VRML.

Abstract. In this paper, we propose a methodology for mapping Web site structures into architectural metaphors, using VRML as the main language for this description. This methodology is applied using a virtual building as the main structure for representing a Web site. This representation is based on clues given by the prospective owner of the site. The filling of this building is achieved with two types of three dimensional icons: the “roomlets”, representing different categories of rooms (subsections) that can be put inside the building, and usual icons that represent the information available inside these rooms. We first propose a three steps methodology that can be used to construct such a site, we then describe some aspects about the structuring of a site using visibility and navigation graphs to represent the organization. Finally, we apply this new methodology to model a personal site.

1 Introduction

In this work, a new methodology for mapping Web site structures into architectural metaphors is discussed. The adopted approach is based on the use of the Virtual Reality Modeling Language (VRML) as the main language for this description.

There are in our view two possible ways of achieving this mapping. First, we may consider translating an existing site into a three-dimensional architectural structure. A second way of dealing with this mapping is through the construction of a virtual building or virtual house based on clues given by the prospective owner of