A Design Patterns Catalogue for Web-based Emergency Management Systems

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Abstract. The design of domain specific information systems, like Emergency Management Systems, has to rely on the participation of experts with different backgrounds. Such multi-disciplinary process is often characterized by misunderstandings and communication problems. In this context, design patterns might be a useful tool to communicate ideas since patterns collect solutions to recurrent problems in a domain using a language that should be understandable by a general audience with no technical knowledge. In this paper we introduce a catalogue of design patterns for Web-based Emergency Management Systems (WEMS). We have used three sources to find out patterns: design principles for WEMS, existing WEMS and design patterns from other related design areas including interaction, ubiquitous computing or security. Furthermore, the catalogue is deployed as a collaborative web application so that designers can navigate through the patterns space but they can also make the collection grow adding their own expertise.

Keywords: HCI design, emergency management systems, web design patterns, navigation scheme.