Creating Flexible Interactive Workspaces through Data Source Composition

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ABSTRACT

This paper presents an approach and a composition platform to enable non-technical users to create interactive workspaces in which content of interest, extracted from online data sources, and functionality to manipulate it are properly organized. A contribution of this approach is the flexibility of the applications shaped up by users, who can dynamically configure each application layer (data, functions and presentations) depending on their needs. Literature reports that composition paradigms proposed so far are not adequate to end users' needs in specific application domains. The approach described here is instead particularly suited to customization of the composition platform so that domain specificity can be improved. To this aim, a set of mechanisms permits to associate content to different visual templates, which are containers adaptable at use time to different contexts. A study with end users was conducted to identify requirements for customizing the platform to a technology-enhanced learning context.

Author Keywords

Exploratory User Interfaces, Composition Paradigms, Service Composition, User Study.

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