

Scrutinizing User Interest Models with IntrospectiveViews

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Abstract. In this paper, we demonstrate the application of the IntrospectiveViews interface for scrutinizing user interest models. We illustrate how with this interface the user can get an overview of what the system “knows” about her interests, obtain details about any interest, and alter her user model.

1 Introduction

IntrospectiveViews [2] is an interactive visualization interface to user models. Through this interface users can see what the system “knows” about them and edit that information. These user models can then be used as the basis for adaptation, e.g., for sorting news stories in a news portal. IntrospectiveViews follows Shneiderman’s Visual Information Seeking Mantra [3]: “overview first, zoom and filter, then details-on-demand”. It offers users an overview over all terms present in their interest models, it allows for zooming into different parts of the model, filtering terms according to different criteria, and it will provide details on demand.

This demo will showcase the usage of IntrospectiveViews as the user interest model underlying an adaptive news portal. It will show how the user can interact with IntrospectiveViews and how changes made to the user model via IntrospectiveViews influence the adaptation provided by the news portal.

2 Brief Introduction to IntrospectiveViews

IntrospectiveViews, shown in Fig. 1, is implemented as a Java Applet. It displays user interests on a circular surface consisting of three colored rings. Positioning of interests (terms) on the surface, namely the distance from the circle center, is determined by the terms’ exact degree of interest. Here it means that the closer a term appears to the center, the higher interest it represents. The interest degree is also encoded in the term’s font size. Each ring represents a certain interest group. The color scheme of rings is chosen according to the hot-and-cold metaphor, where hot, represented by red color, denotes interest and cold, represented by blue color, denotes no interest. The colors between red and blue

rings). In order to add new interest the user can double click in any place on the surface and select the term from the popped up menu. Terms can be removed by dragging on to the recycle bin or through the term's context menu.

We are currently implementing a number of other features, some of which were suggested in the first formative evaluation of this interface [2]. Among others, we are implementing the features for obtaining the model's snapshots in the past, exporting the model, searching terms, and the undo feature.

3 Description of the Demo

For the demo, visitors will be able to assume the role of one of three news portal users with different interest models, which we have created following the user modeling approach as described in [1]. For example, one of the available interest models is the model for Klaus, a German guy interested mostly in news about his home country, politics, and business. As those users, visitors will be able to use IntrospectiveViews as described above and to observe changes to a news portal resulting from their adaptations of the interest model.

4 Conclusion and Future Work

The demo will show the application of IntrospectiveViews for scrutinizing user interest models. The interface allows the user to get an overview of the entire model, provides possibilities to zoom in, to filter, to obtain details including relationships among concepts, and to change the model. In our future work, we plan to introduce a number of features that increase the user's engagement and motivation to scrutinize, such as, e.g., a feature for comparing a person's interest to those of communities she is a member of.

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