THE UNIVERSITY OF AUCKLAND
Department of Computer Science 2010

COMPSCI 732

CLASS EXERCISE: Visual Wikis

1. Introduction

The aim of this lab exercise is to give you individual experience in the use of a couple of Visual Wiki applications. After that, you will get into groups of 4-5 to do a design exercise on a new type of Visual Wiki applicaton.

2. Visual Wiki Exploration (20 minutes)

a. Thinkbase (http://thinkbase.cs.auckland.ac.nz/) is a visual navigation and exploration tool for **Freebase**, a public semantic wiki. Thinkbase visualizes the semantic contents and relationships of Freebase in an interactive graph.

Before opening Thinkbase, explore Freebase: http://www.freebase.com/ to understand how it works. E.g. search for your favorite movie, then see who directed it and find out what other movies (s)he directed.

Now, open Thinkbase and perform the tasks below to become familiar with the tool. You will see Freebase in the right frame and the visualization in form of a graph in the left frame.

1. Explore the knowledge space using the visual representation in the left frame:

- On startup, a movie will be shown as the centre node. Hovering the connected nodes will show you the type of relationship. You can for example see who is starring in the movie, who directed it, etc.

- Click on the nodes (the icons) to navigate to related objects. Or use the search box at the top (search e.g. for "Java", "Mars", or "Homer Simpson". Clicking on the nodes will show the corresponding article in Freebase in the right frame.

2. Explore the right click menu:

- Right click on a normal node. You have 3 options: open the selected item in Freebase, search for it using Wikipedia or Google, or expand/collapse the node (i.e. to show more/less related nodes).

- Right click on an aggregation node to collapse or expand it.

3. Explore some of the other functionalities such as zooming (using the menu buttons or the mouse wheel), the Share function, etc. If you are really adventurous, you might like to sign up as a user of Freebase, construct your own Freebase content and visualise it using Thinkbase.

b. Thinkpedia (http://thinkpedia.cs.auckland.ac.nz/) provides similar functionality to Thinkbase, but for the conventional wiki, Wikipedia. To provide the same effect, a *semantifier* is used to extract semantic content from the current wiki page and relationships based around the semantic links identified are created.

Repeat the same types of exploration as for Thinkbase, but look at the differences that result due to the different Visual Wiki construction. Does this make it more or less useful? What surprises might result.

3. Design exercise (30 minutes)

Get together in groups of 4-5 and consider either:

1. Areas of improvement for either or both of Thinkbase and Thinkpedia – what extra features would be good to have? What existing features could be done better?

2. Come up with a design for a new Visual Wiki style application. From your knowledge of other types of social or software engineering software what would be a good extension of the visual wiki approach (eg Thinkmap visualisation plus wiki plus Facebook; Google Maps plus geotagged wiki content plus Thinkmap visualization; Thinkmap visualisation plus Java doc plus Java code). What functionality would this offer a user that would make him/her want to use it? Perhaps express the design using the VikiBuilder DSVL.

3. Results

The group is responsible for preparing a short document describing the outcomes of your group collaboration and emailing it to John Hosking (john@cs.auckland.ac.nz) prior to the following Monday class. These documents will be made available to other class members on the course website. The document can be bullet points, a scanned pencil and paper design, or similar – the content is what is important not the formality.