VIDEO TAG

a tagging experiment

Stacey Greenaway – University of Wolverhampton

MSC Computer Science (Internet Technology) stacey.greenaway@wlv.ac.uk

www.videotag.co.uk

1. Overview

VideoTag is a tagging experiment that aims to discover whether by making the tagging of video clips fun, users can be encouraged to tag more videos with a higher quantity of tags and with more descriptive tags.

Aspects of the tagging process investigated include:

- How users tag
- Why users tag
- What types of tag users enter.

2. Background

A more extensive literature review has been undertaken, the key pieces of research from which the VideoTag experiment has been developed are identified below:

- Primarily inspired by the research of Van Ahn and Dabbish (2004). The ESP Game, labelling images to improve accessibility and image search.
- Tagging process: How and Why users tag, theories proposed by Marlow et al. (2006) and Bar-Ilan et al. (2006). Blind vs. Suggested vs. Guided Tagging.
- Types of tag and tag quality defined using guidelines presented in the research of Golder and Huberman (2005). Semantic difference and frequency.

3. The Game

- A one player game where players are asked to tag funny video clips in a given time frame.
- They will score points throughout the game and be entered into a leaderboard.
- The game will involve pitfalls where points can be lost.
- The game will consist of five levels, each subsequent level being more difficult than the previous one.

4. Objective

- Can the tags entered be useful in creating descriptive text descriptions of internet video, in order to improve accessibility of video for visually impaired users?
- Pitfalls = basic level tags. By avoiding pitfalls it is hoped that more descriptive tags will be entered.
- Assess the quality of the tags based on their semantic level. Basic level being of lower quality than, subordinate level, descriptive tags.
- Example: A video of 2 cats chasing each other up a tree. Basic tags might be Cat, Tree, Chase. More descriptive tags could include the breed of cat, whether it is in a garden street or park, colour of the cats, the season, an indication of the weather, snow, sunny. Any other distinguishing objects in the video.

5. Experiment

- Aiming for 100 players.
- Not a controlled experiment - Random users.
- The game will be promoted on discussion forums, social sites, by emailing friends and also on mashup sites
- By allowing users to participate in the experiment at their own time and in their own environment, the quality of the tags they enter are not going to be affected by pressure from being in a controlled environment.
- They can play the game as often or as little as they like, hopefully maximising the amount of data I can capture.
- By making the game as fun as possible, hopefully enough users will be enticed to play it more than once and also forward it onto friends, to maximise the amount of data available for the evaluations.

6. Evaluation

- Suggested vs. Blind – compare the amount of tags entered of each type and analyse their descriptiveness and semantic level.
- Tags will be plotted on a graph in order to plot their frequency. Will the structure of the game affect the power law common in most tagging systems? Reducing the frequency of basic level tags, therefore affecting the long tail effect.
- Players will be requested to fill in a questionnaire which will focus on their enjoyment of the game.

7. References

BAR-ILAN, J., SHOHAM, S., IDAN, A., MILLER, Y. & SHACHAK, A. (2006) Structured vs. unstructured tagging ? A case study. *Proc. of the Collaborative Web Tagging Workshop (WWW '06)*, Edinburgh, Scotland.

GOLDER, S. & HUBERMAN, B. (2005) *The Structure of Collaborative Tagging Systems* [Online]. Available from:http://arxiv.org/abs/cs.DL/0508082 [cited 09-03-2007]

MARLOW, C., NAAMAN, M., BOYD, D. & DAVIS, M. (2006) HT06, tagging paper, taxonomy, Flickr, academic article, to read. *HYPERTEXT '06: Proceedings of the seventeenth conference on Hypertext and hypermedia*, pp. 31-40.

VON AHN, L. & DABBISH, L. (2004) Labelling images with a computer game. *CHI '04: Proceedings of the 2004 conference on Human factors in computing systems*, pp. 319-326.