



European digital content for the global networks

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Groupware for Distributed Content Production
KOM2002
D4.1 Monitoring, Rating and Logging Plan

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Abstract (for dissemination)	This report describes the monitoring and rating of usage needed for performing the tasks of the project.

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1 Introduction

The KOM2002 project will, as part of its work, do an evaluation of the usefulness of our web services. For this purpose, it is useful to monitor and log usage of the services.

The stepwise improvement of our website, which is an important part of our work, also is greatly aided by monitoring and logging.

The monitoring and logging will not infringe on the privacy of our users and any information or statistics held by the system will just be used by the researching team involved in the project. The statistics will be both individual and general.

2 Different Kinds of Monitoring

2.1 Ordinary Access Statistics

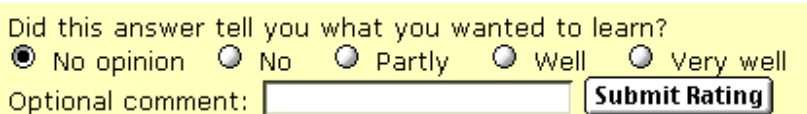
We will employ ordinary access statistics for our static web pages. These statistics will tell us how often people access the different static pages, which pages are most interesting for the users, and also how people navigate in our system.

2.2 Natural Language Query System Logging

The natural-language question-answering system will log all the questions received by the system, including the date and the time of the submission, the IP number of the user, and a list of the answers provided by the software for each question. The IP number (and the nickname) have a special importance because they can be used to identify a succession of queries made by the same user. In some extreme cases, it is necessary to track the identity of a person behind an IP number, as described in 2.5 below.

Of special importance is the logging of cases where no good answer can be retrieved, as well as the logging of words that do not occur in any of the existing templates. Such words may be misspellings, or indications of deficiencies in the set of FAQs or in their classification. If misspellings occur often, this might indicate a need to support handling of misspellings in our software.

The user interface will provide an optional interactive feature (see fig. 1), to allow the users to rate the quality of the retrieved FAQs. The ratings and the optional comments will be logged and used to improve the retrieval of FAQs.



Did this answer tell you what you wanted to learn?

No opinion No Partly Well Very well

Optional comment:

Our research team is considering to extend the query submission with a multi-step dialogue to help the users to refine the research. If such a solution is implemented, all the steps involved in the dialogue will be logged.

We are also considering to change the presentation of the retrieved information so that the user will have to choose between a list of links instead of seeing all the retrieved answers on the same page. This will

“force” the user to click the link of the most interesting answer(s), allowing the researchers to see the alternatives that best answered the user’s question or best helped to solve his/her problems. If no answer is chosen we can deduce that the system did not return a valuable response for the user. The chosen links will be associated with the nickname or the IP-address of the user.

2.3 Personalized Logging

The logging described in 2.1 and 2.2 will mostly be anonymous. We may however, later on in the project, include indication of who caused a certain log entry, based on the identities users have chosen in the forum and chat system. Note that if these are pseudonymous identities, the log will indicate the pseudonym, not the real name of the user.

To protect privacy, these personalized log files will only be accessible to researchers in our project for the purpose of testing, evaluation and stepwise refinement. The ethical guidance rules for medical research in each country will be adhered to by the researchers in that country using these logs.

2.4 Distribution of Monitoring Data

In addition to saving monitoring data on a log file, the software will also for certain logging data of special importance for stepwise improvement send this data by e-mail to those researchers in the project who need this information. The information sent in this way will always be anonymous, not indicating the identity of the user.

2.5 Abuse Monitoring

If a user seriously abuses our software, or if our services are used for illegal purposes, we may set up additional temporary logging in order to find the culprit. Users are warned in our privacy statement not to abuse the system or use it for unethical or illegal purposes. If a case of abuse occurs anyway, the user will be first warned, without trying to discover his/her real identity. If the abuse still does not stop, then the responsible(s) will be identified. We may also be forced by law to do logging if the police requires it, in cases where illegal activities are involved.

2.6 Research on improved question-answering

We intend to test methods to improve the quality of question-answering. Those users who are willing to participate, may be given various modified versions[A2], and we will ask them to rate the results. Such users will also be asked for certain basic statistics, such as age, gender, occupation, interests or problems. This will be a voluntary feature. We are considering to introduce a recommendation functionality that allows users to suggest interesting answers to friends or relatives via e-mail and a module that checks the keywords in the latest three/four questions submitted by a certain user.

3 Reporting

The following reports can be produced, we have not finally decided exactly which we will produce.

Page hit counts for static and dynamic pages, including referrer statistics.

Query system statistics of questions, words used in questions, unmatched words in questions, questions that did not give any hit, questions that were explicitly rated as good or bad by the users. Time between successive queries from the same user, and how this time relates to the previous and the new query. We are considering to take samples comparing the relationships between successive queries (inter-query relationship) submitted by a certain user, with the aim to deduce if the query that follows is a generalization, specification, reformulation of the first one or a totally new query.

For those users who allow us to trace their behaviour, logs of a single user's behaviour during a session or a day. How long time does a user stay? Does a user come back for more sessions another day or not?

For the forum system: Number of contributions per month, number of active members (reading resp. writing) during a month, number of questions sent to the ask-the-expert service, time before such questions are answered.

For the search system: Number of Alkaline searches. Number of hits. Number of unsuccessful searches (no hits). Logging of text of unsuccessful searches.

3.1 Draft format for rating statistics summary

From	2003-08-01 12:15
To	2003-08-09 20:33
Total number of questions	1034
Number of questions with only-related answers	234
Number of questions with no matching answers	986
Number of questions with non-recognized words	986
Number of questions rated by the user	986
Number of answer sets rated "No"	986
Number of answer sets rated "Partly"	986
Number of answer sets rated "Well"	986
Number of answer sets rated "Very well"	986
Number of individual answers rated "No"	986
Number of individual answers rated "Partly"	986
Number of individual answers rated "Well"	986
Number of individual answers rated "Very well"	986

3.2 Draft format for rating log report

No .	Code	Act s	Lang .	User question	Error type	Replies	Rating code	Rating text	Date
1			en	insult comebacks	Unanswered question, RC= -1	Replies: 0 Related: 0	No	I did not get any reasonable answer to my question	2003-07-15 5:54:27 PM
2			en	xanax	Unanswered question, RC= -1	Replies: 0 Related: 0	Well	What I wanted, except for the info on phobia	2003-07-15 6:48:50 PM
3			en	who are the web4health experts?	Only related answers, RC= -2	Replies: 0 Related: 9 1: project-this-site-rules Rules for Web4Health Users 2: ed-treat-get-help.1 Clinics with Help on Eating Disorders : :User rating: Very well, exactly what I wanted 3: ed-treat-general Different Ways of Treating Eating Disorders : :User rating: Partly 4: more-menu More, Links 5: project-faq-help Web4health Help 6: project-high-quality Quality of Psychological Information in web4health 7: project-this-site-info Information about Web4Health 8: project-this-site-privacy Privacy and Anonymity in Web4Health 9: experts-martin-winkler Martin Winkler	Very well	Exactly what I wanted	2003-07-16 4:42:50 AM