

Analysis of user behaviour on the Web

Patrik HLAVÁČ *

*Slovak University of Technology in Bratislava
Faculty of Informatics and Information Technologies
Ilkovičova 2, 842 16 Bratislava, Slovakia
patrik@hlavac.sk*

Development of web systems has changed considerably in recent years and it also changes the importance of the estimation of the user and further recommendations. Analyzing user behavior on the Web and interaction with a web browser via computer is a nontrivial matter, where new solutions have recently opened with better availability of technology and equipment. While existing solutions are based on monitoring the behavior directly in the browser by using only basic peripheral devices, now we have the possibility of directly monitoring user's gaze and focus blocks of content on the website. Devices called "eye tracker" provide irreplaceable information about a user's gaze.

One objective of this work is to propose a user model suitable for collecting data from interactions in a Web environment. We consider the user model as a summary of information about a given user, which we can obtain by implicit or explicit feedback directly with prepared system. With more frequent interaction, we gain more knowledge of his behavior and we can characterize him better.

The primary task will be to gather information through sensor device to identify the fields of view of the user's interest in the content on the screen along with the use of other devices (mouse, keyboard, microphone), which allow the acquisition of implicit feedback. These data from interaction will be processed in the user model.

Collecting accurate information about the content and the text with which the user came into contact will help us to determine the amount of information received and also help estimate the user's knowledge from the user model. These can be verified by explicit feedback, a test or questions.

* Supervisor: Marián Šimko, Institute of Informatics and Software Engineering

Acknowledgement. This contribution was partially supported by the Research and Development Operational Programme for the project “University Science Park of STU Bratislava”, ITMS 26240220084, co-funded by the European Regional Development Fund.

References

- [1] Labaj, M.: User Feedback for Personalized Recommendation: 10–16 (2012)
- [2] Joung, Y., El Zarki, M., Jain, R.: A User model for Personalization Services. Digital Information Management, 2009. ICDIM 2009. (2009)