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TOOL FOR eLEARNING EVALUATION

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Abstract: The paper deals with the determination of factors that can be used for evaluation of eLearning courses. In addition to basic information about a course, there are technical, didactical, content and user-friendly aspects and a way how a management system is used. A software tool was designed by means of technology *Microsoft Office SharePoint*. Data from some courses that run at the University of Ostrava were stored. A feedback correction was done after analysis of collected data.

Evaluation - is a relatively new term in the Czech language. It originates from Latin, where *valere* means strong, valid and solid. That word was transferred from Latin in English, where *evaluation* means to determine the value, to evaluate. At the same time, other terms have been used, such as assessment and self-assessment.

eLearning is an educational process using information and communication technologies for the effective achievement of the educational objective covering the development of educational objects, distribution of study content, implementation, communication among the educational process participants and study management.

Evaluation tool design should completely cover the whole issue of eLearning and encompassed all aspects of the eLearning course. The attention was paid:

to education web sites operated by Ministry of Education and Youth (mainly pedagogical aspects); web sites of **edutools** (especially technologies used);

important - educational objects are in compliance with SCORM.

Evaluation criteria - categories of the tool for evaluation of eLearning courses:

- •basic information (name, subject, author, form of education, users);
- •more detailed information (source, licence, funding);
- •technical aspects (installation, functionality of links, of media and browsers, etc., the method of delivery, standards of interoperability, accessibility including for disabled students, hardware and software requirements);
- •didactic aspects (study materials, motivation, involvement of student, tasks given, games and simulations, types of tests and methods of their "marking", repetition of subject matter);
- •content aspects (objectives, educational strategies, adaptability of learning, way of presentation, correctness of data, level of difficulty, possibility of updating);
- •user-friendliness (help, possibilities of advanced search, navigation, aesthetics, indicator of tracking, own pace, glossary of terms);
- •control elements and multimedia (variability of multimedia objects, graphics, audio and video, animation, text, suitability of graphics and multimedia elements);
- •communication in the course (email, chat);
- •management of the course (LMS).

Technical solution – technology used to implement a web server MSDN Academic Alliance program; data are grouped and entered in lists of Sharepoint. **Platform used** – MS Windows Server 2003 R2 in editions of Standard Edition and Enterprise Edition.

Development tools:

InfoPath 2003, Visio Professional 2007, SharePoint Designer 2007 and SQL Server Management Studio Express.

Application layer:

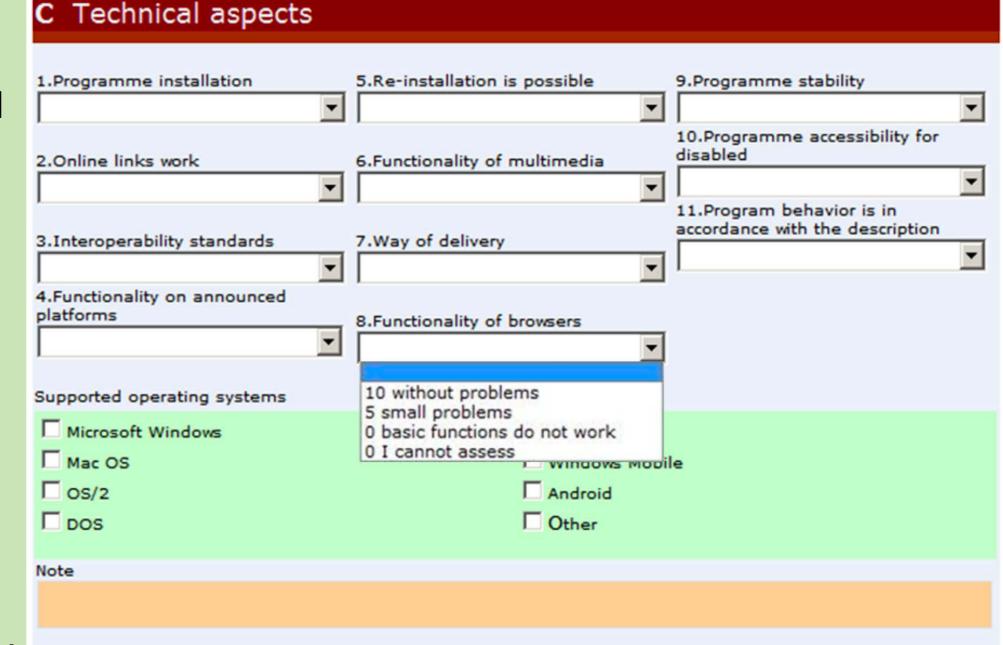
Application server and application layer - Internet Information Server extended by ASP.NET 2.0, a part of NET Framework 3.0.

Microsoft SharePoint – portal solution operating on web interface.

Database layer – SharePoint Server 2007 support data repository of MS SQL platform, upgraded by SQL Server 2008 Enterprise.

Portal development – separate collection of web sites has been developed.

Demonstration of the evaluation form of *Technical aspects*:



Conclusion. The proposed model solves the issue of expert evaluation of eLearning courses as the analogy of evaluation of the educational environment. Criteria for evaluation were selected, entered into the evaluation model and implemented in Microsoft Access and InfoPath environment. Evaluation of representative courses at the University of Ostrava was tested by some authors and tutors of courses. Analysis of completed evaluation questionnaires showed that evaluators did not fill in the items of free response and they also avoided some technical evaluations of the course. That information and next experience resulted in some recommendations for the model modification, mainly for the evaluation questionnaire (Novosad, 2011).

The evaluation tool is primarily intended for evaluators. It can also support authors and mainly developers of eLearning courses. Further development of the proposed evaluation tool assumes the use in practice and improvement on the basis of reactions of respondents. An important step to the build of the comprehensive tool is participation of experts from various scientific disciplines.

This paper introduces results of the following thesis:

NOVOSAD, P. Evaluace elearningových kurzů na Ostravské univerzitě. Ostrava, 2011. Diplomová práce. Ostravská univerzita. This work was supported by the Czech Science Foundation under the contract No. 406090242.