

SYSTEM FOR DISTANT ACCESS TO MATERIALS AND FOR DISTANT WORKING

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ABSTRACT

This article describes a proposal of a system for distant access to various materials and for distant working – it is that user is able to process tasks self-containedly on the system and after that hand in it by using this system. When the task is handed in so others user can evaluate or process it. This system is created according specific requests of establishment.

1 FOREWORD

More than ten years we can use educational courses. The first applications were simple DOS programs. With entering of the operation system Windows educational courses were started to be more complicated. Were added graphics elements, animation, video sequences, sounds. Applications could be called electronic educational courses. Sadly an accessibility of technologies brakes using of this courses. But courses can't be use without adaptations usually.

The suggestion to this work is creating system according specific requests of establishment especially simplicity and suitability for the users and establishment. Created system is business-educational system.

2 PROPOSAL OF THE SYSTEM

2.1 DEVELOPMENTAL MODEL

It was selected incremental model with elements of prototyping (especially for a design of an interface) for this system.

2.2 USED TECHNOLOGIES

System is based on HTML pages with PHP and JavaScripts. Structure is XML for storing materials. This technologies was effective [1] and are the most accessible still. From a view of hardware is enough computer on which can be run Microsoft Internet Explorer 5.5

and higher, together with Internet connection. For basic work is enough modem connection, if there are stored larger materials here it is better to use faster connection.

2.3 USERS OF THE SYSTEM

There are three types of users in the system.

- Administrator – adds and removes modules and manipulates with documents in data warehouse like the highest authority.
- Common user (student) – can look through materials and can give in developed works.
- Expert user – inserts, adapts and deletes materials and processes inserted works. Expert user replaces teacher because this system isn't created directly for school domain. Furthermore this user has more extensive spectrum of functions.

2.4 MAIN FEATURES OF THE SYSTEM

- an access every time and from every place with Internet connection
- minimal hardware requirement – due to the fact that not all users has the newest technical devices, it is necessary to guess that system can't be technically exacting – it means that in the system can't be use animation (Flash) a if they will be used graphics elements, they must be practical not impressive.
- an ability develop tasks independently on the system – processing of tasks isn't depend on the system user develop the task and next he inserts it into the system. All documents will be saved in the one place (data warehouse), from which can be used. We reach better safeguard by this way.
- documents are stored in the data warehouse – how it was said system is created according concrete requirements so the main kind of materials, which will be stored are information about products and prices offers for customers.
- single parts (theme) are structured into logic blocks

2.5 STRUCTURE OF MATERIALS

Informations about products include this parts:

- promotion leaflet
- technical parameters
- Czech user guide
- original user manual
- original service manual
- Czech service manual
- price list
- additional materials

Information about offers have another structure:

- object of offer
- offer
- reaction of customer
- contract
- customer

Therefore must be possible to change individual type of documents. There are used templates to describe individual parts of materials. For simple possibility of change are used templates in XML. For bigger transparency each part has its own directory, for storing materials belong into this part.

3 CLASS DIAGRAM

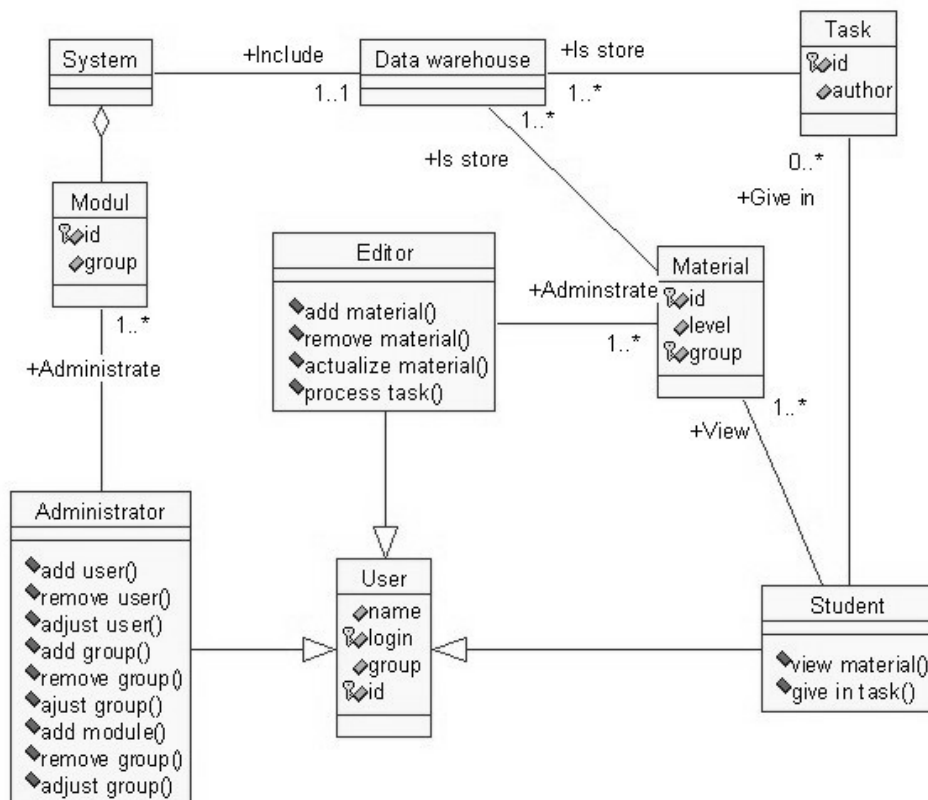


Fig. 1: Class diagram

This basic diagram shows a way how the system works. The system consists of freely joinable application modules (each module has unique name) and of data warehouse for storing all materials which are used in the system.

Due to the fact that the system (the proposal) will have really utilization it is guessed

with more latitude of work of users according requirement of stand in for someone.

4 NEXT PROCESS

In the next period the proposal will achieve with cooperation with leader to the system be usable for concrete requirement and for next development. Some elements will be suppressed some will be highlighted so that system can't be change during implementation.

5 CONCLUSION

In this article was presented the proposal of the system for access into stored materials. In the next period it will be worked on the system continue. And I hope that next year I will be able to present the first part of an implementation of this system.

REFERENCES

- [1] Čech, V., Integrovaný systém elektronického vzdělávání – graduation paper, FIT BUT, 2003
- [2] Čech, V., Integrated System for Electronic Education (ISEE), In Proceedings of 9th Conference and Competition Student EEICT 2003, Svazek 1, Brno, 2003, str. 196, ISBN 80-214-2377-3
- [3] Kosek, J., HTML – Tvorba dokonalých WWW stránek, Grada 1998, ISBN 80-7169-608-0
- [4] Kosek, J., PHP – Tvorba interaktivních internetových aplikací, Grada 1999, ISBN 80-7169-373-1
- [5] WWW pages about language PHP <http://www.php.cz>, 2004-01-04
- [6] Pytlík, J., Subsystém pro sledování studijního progresu v elektronickém vzdělávání – graduation paper, FIT BUT, 2003
- [7] Zajíc, T., Subsystém pro správu dokumentů v elektronickém vzdělávání – graduation paper, FIT BUT, 2003