Abstract

on the topic «Procedures of monitoring of quality of the remote education with the use of ontological approach»

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The purpose of work

The purpose of this work is research of possibility of automation of knowledges control process with the use of ontology of subject domain. To develop the method of the automated construction of test on the basis of ontological presentation of educational material.

Urgency of spent researches

The educational computer systems must contain the automated function of control of knowledges and analysis of results of studies. At that time, as much researches in the area of computer control of knowledges concentrated on the questions of valid and reliability of tests, question of forming of bank of tasks, in most cases it remains exceptionally the prerogative of teacher which works with a course, without suggestions of automation of this process. The attempt of automation of forming of tasks for a test comes across the area of artificial intelligence and question of formalization of knowledges for their subsequent using for drafting of control tasks for a test. The task of creation the model of knowledges representation for the construction of the modern educational system will become possible appears therefore.

For today within the framework of semantic technologies the ontological going is more active probed and develops near representation of knowledges of subject domain, which the intellectual informative systems are developed on the basis of. Ontology allows to open out the effective systems of piling up and exchange information, task of which - to accumulate separate not information, but structured, formalized information, that allow to decide the real production and economic tasks.

Tasks solved in work

Theoretical information is in-process presented about the concept of ontology, methodology, and facilities of its creation . The concept of test and its parameters is considered. The method of automatic generation of claims of educational course is described with the use of ontology of subject domain and the methods of construction of questions of test.

Perspective of development of the resulted method is analyzed, found out the row of failings and the list of recommendations is resulted to subsequent perfection of function of the automated control of knowledges with the use of ontological presentation of educational course.

The achieved results

The result of the conducted researches is practical part of work which consists of the

developed method of the automated creation of test on the basis of ontology of subject domain. Quantitative description of generation of assertions and questions is conducted taking into account the select values of parameters of test. A program functional is developed for the import of information from ontology of educational course and use of them in creation of knowledges test.

Scientific novelty

The innovation of the executed work consists in the use of subject domain ontology for test creation. It is a new way in decision search of facilities automation control knowledges process. Certain methodology of planning of ontology of educational material is offered for creation of possibility of its subsequent use in a construction the form of tasks a test.

Practical value

The practical value of work consists in the receipt of program mean which provides the automated control knowledges functional and enables us to get around the put purpose - of effective mean of students knowledges monitoring search on a step.

Conclusions and recommendations

Theoretical information was in-process investigational about the concept of ontology, methodology, and facilities of its creation . The concept of test and his parameters is considered. The idea of automation of create tests is offered with the use of subject domain ontology and methodology of ontology course planning is described . A programmatic functional for the receipt information from onology of educational material is developed, that it was realized by the applied programmatic interface of Owldotnetapi. The method of assertions construction on the basis of the knowledges got from ontology, and variants of creation questions on the previous stage of assertions is described. The count of got questions is conducted. The prospects of offered idea development

are considered and the row of recommendations is resulted to subsequent perfection of automated control knowledges function with the use of subject domain ontology.

Work on 110 sheets contains 2 tables, 27 illustrations and 4 appendixes. By preparation of work the literature from 28 different sources was used.

The list of key words:: Remote education, subject domain ontology, ontology editor, OWL, RDF, Protege, OwlDotNetApi.