

DEVELOPMENT OF AN INTELLECTUAL COMPUTER PROGRAM,
TEACHING ALGORITHMIC SKILLS

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Introduction: From the standpoint of systematic process management, a number of destabilizing factors characterizes traditional learning knowledge and skills, negatively affect the quality of training of trainees. Among them: disturbances affecting trainees and mentors; weak professional and pedagogical training of individual mentors; low starting level of knowledge and skills and lack of individual motivation trainees. In modern times, intelligent computer programs are promising learning tools. Such programs are cybernetic, can have almost unlimited resources for the effective formation of professional competencies of the trainee and constitute a high speed [1]. So, we need for distance and adaptive learning.

Objective: Develop of an intellectual teaching program that will help students learn Structured Query Language and improve algorithmic skills. The training program should offer students, who have not passed with the task, tips, give instructions and assist in the passage of tasks, of tasks in case of difficulties or repeated errors

Applied method: in the course of the work were studied and used methods of creating an intellectual teaching program, a modified q-gram method with preliminary replacement of keywords in the Structured Query Language, methods for building a syntax tree, methods for comparing Structured Query Language queries.

Work results: An intelligent computer program was created. She assesses the level of training of students, displays the assessment of the assessment of knowledge and gives advice on their improvement in the results window.

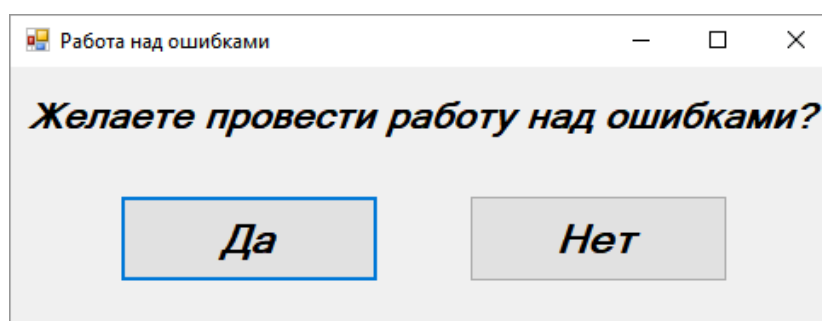


Fig. 1. First Results Window

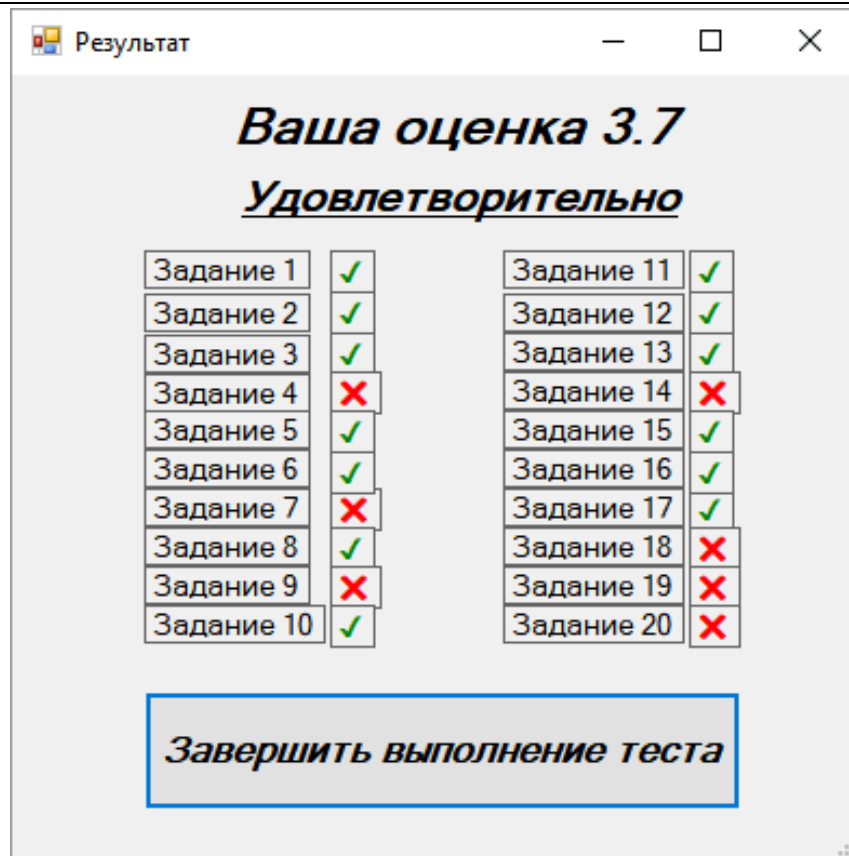


Fig. 2. Second results window

Findings: in the progress of the research, the basic principles of building intelligent training programs were studied and the learning process of intelligent systems was considered. The classical q-gram method was modified by preliminary replacing the keywords Structured Query Language. An intelligent computer program that teaches the Structured Query Language has been developed.

References

1. Corbett, A. T. Student modelling in the ACT programming tutor: Adjusting a procedural learning model with declarative knowledge [Text] / A. T. Corbett, A. Bhatnagar // Courses and lectures – International Centre for Mechanical Sciences. – 1997. – P. 11–14.

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