INTERACTIVE TRAINERS FOR E-LEARNING

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Within the limits of the introduction of e-learning courses developed at our university, there appeared a problem of creating effective examination procedure mathematical and economic disciplines. To realize this problem we applied such tool as interactive trainers which allow simultaneously acquire the courses material, and submit results of the students work to the server

The Java technology has been chosen for the realization of the problem. The trainers represented by Java Applets.

The pattern of a trainer-applet has 2 forms: a condition and its solution. The condition is each time generated with different variables (randomly or depending on the chosen variant). The form of the solution gives an opportunity to send an inquiry for teacher's help, has standard help to use a trainer, a built in calculator and is realized step-by-step. It is possible pass to the following step it is possible only after a correct ending of the previous step. The amount of unsuccessful attempts is limited. Pressing the "Next" button allows to pass to the following step (if the correct step is current) or you are given out a message about a mistake. After completing the trainer the results are submitted to the server. A screen picture of the condition and the current step, as well as inquiry teacher's help are submitted to the server

After the condition has been generated, the student can change the given conditions, by pressing the «New variant» button. It is possible to pass on to the task solution form. As a whole, to examine the student it is possible to use not only text fields for the input of various variants of the answer (radiobuttons, checkboxbuttons), but also possible also dropping out lists and lists for whole formula. There is also practice of creating trainers which show creative abilities of students (for example, to create a model of an enterprise, using the offered base components). There is also practice of overlapping of Java with Flash technology. It is frequently necessary to combine the functional potential of Java with the beauty of registration from Flash. Some trainers on descriptive geometry have been created.