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The MathMax Application as a Way of Computerizing Production Processes

“The need to implement automation systems has long been taken into account”. In the age of information technology, many organizations automate some of their production processes, transferring them to software. As for education, “a lot of digital products available today feature elements of adaptive learning. The level and methods of adaptation may differ, being largely contingent on the context of software application and the specific aspects of a particular learning process” [1, 2, 3].

After reviewing existing mathematical apps [4, 5], such disadvantages as an overloaded interface and dependence on the Internet connection were identified. We have created a stand-alone program that has an intuitive interface, even for an inexperienced user, which can greatly simplify the work with the application.

MathMax can perform complex mathematical calculations visualizing them in the form of a graph. It enables a user to select a mathematical function, calculate and display the values of each variable, and draw the exact graph of the selected function based on the received values.

This program is developed with the use of language C# in the Microsoft Visual Studio 2019 Community Edition environment. It is implemented as a Windows Forms application for the runtime environment (.NET Framework).

The MathMax application can be employed in educational institutions to facilitate visualizing mathematical functions in the form of graphs and improve the assimilation of learning material. It can also be used in enterprises for calculating statistical indicators and analyzing economic and physical processes.

Литература

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