

DEVELOPMENT OF SOFTWARE MODULE FOR THE ANALYSIS OF ELECTRICAL CIRCUITS

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Abstract. Applicants often do not choose technical education because of the difficulty of this sphere or the lack of engineering knowledge and real engineering practices that so important. This issue opens up a new development space for educational software for the beginners and non-professional users. Such problem as difficulty of choosing and obtaining an engineering education is considered. This paper presents an investigation of the electrical circuits and development of a program module for the schemes analysis that could be easily embedded in educational establishments. Existing technics for analyzing electrical schemes were observed and the most effective one was chosen. The main goal was attained using the WPF technology of .NET Framework. Altogether, the research provides a simple instrument for circuit analysis that gives some helpful information about electricity and the circuitry. It automates verification of practical tasks and exercises made by students and allows to refuse the use of complex electrical stands. Furthermore, the developed application can be integrated into the educational system as a tool for teaching staff and development of popularity for technical specializations.