

In this thesis we analyzed the design and implementation of the program allowing you to perform discrete-event simulation. Further in the program we implemented visualization of discrete-event simulation. Emphasis is placed mainly on universality. In addition to the program and its description includes information of discrete-event simulation, which allows easier understanding of program operation. For a description of discrete-event simulation using finite-state automata and regular grammars. These parts are described more in order to more easily understand the description of the discrete-event simulation. The system also allows adjustment of input files for easier operation of the program.