Simulation of queuing systems in client applications using cloud computing technology

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In «cloud» computing technology usually it is considered that the main computations are performed on the server side and the client performs the function of the terminal. But in some cases, the customer has substantial computational resources which in this case are idle. In the research approach to simulation of systems on the client computer through the Web browser is considered. The interpreter for the formal language similar on syntax and semantics to GPSS is offered. The interpreter is implemented in Java as a special client application — an applet that uses a class library of the Java language. The example of implementation of a simulation model of typical queuing system is considered. Analytical calculation of the model and received results corresponding to analytical calculation, and also comparative temporal estimates of carrying out simulations on other implementations of model are provided.

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