Abstract

People must have been queuing up at service places like banks, hospitals, etc. For now most of the queues are still conventional. The queue is done manually, the customer takes the queue number and waits until it's his turn. In computer systems people are familiar with queueing theory, such as FIFO, LIFO, PQ, etc. Sometimes, it combines several queue theories to execute the program. This study, queuing system will adopt from queue theory which is used by computer system. Hybrid system from FCFS and PQ will serve customers according to their needs. This study was conducted at the service place of one of the government hospital in Surakarta city. The sample queue data will be analyzed and compared when using the conventional queue and after using this queue system. This queuing system utilizes cloud technology to be accessible anywhere and display results in real time. The average waiting time in the hospital service using a conventional queue system is 2-5 hours, while using this system is 10-30 minutes.
References

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Index Terms

Computer Science

Applied Mathematics

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Information system, Queue system, Scheduling algorithm, FCFS, Priority queue, Cloud computing