Abstract

This paper presents an analysis for a queueing system with customer behaviour and priorities. Arriving customers balk (do not enter) with a probability and renge (leave the queue after entering) according to some distribution. The priority discipline followed may be either non-preemptive or preemptive in nature. When the priority discipline is non-preemptive in nature, a job in service is allowed to complete its service normally even if a job of higher priority enters the queue while its service is going on. In the preemptive case, the service to the ongoing job will be preempted by the new arrival of higher priority. At the end of paper benefits and limitations of queueing theory is also given.

References

- Kendall D. G., "Stochastic Processes Occurring in the Theory of Queues and Their


**Index Terms**

Computer Science  
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**Keywords**

Balking And Reneging  
Preemptive And Non-preemptive Priority  
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