

Improved Round Robin Algorithm: Proposed Method to Apply SJF using Geometric Mean

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One of the most important components of the computer resources is the CPU, which is the basis of the operating system, and the major concept of the CPU is the CPU scheduling which control all jobs in the operating system using algorithms like First-Come-First-Serve (FCFS), Shortest Job First (SJF), Priority Scheduling, and Round Robin (RR) algorithms. It is wellknown that all CPU schedule algorithms concentrate on maximizing the CPU utilization and minimizing turnaround time, waiting time, response time, and the context switching. RR algorithm is an algorithm designed for Time- Sharing Systems, on the other hand, RR algorithm allocate processes to the CPU for only one time quantum, and this paper discussed a new algorithm that attempts to set an alternative method for the existing RR algorithm by using Geometric mean as a time quantum and applying the SJF algorithm in choosing the proper process to be allocated for execution.

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