Abstract

Round Robin scheduling algorithm is the widely used scheduling algorithm in multitasking. It ensures fairness and starvation free execution of processes. It performs optimally for time sharing systems, but because of its larger waiting time, turnaround time and greater number of context switches it is not suitable for soft real time systems. The main objective of this paper is to develop a way in which the Round Robin algorithm can be modified for implementation in real time and embedded systems by minimizing its average waiting time, average turnaround time and context switching rate. The paper discusses a fuzzy based CPU scheduling algorithm. A set of fuzzy rules is defined. Each process is assigned a new priority based on its externally defined priority, relative remaining CPU burst time and relative waiting time.

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**Index Terms**

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**Keywords**

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