Abstract

Time of arrival, size of CPU burst and priority are three major factors that are usually attached with a process which is submitted for execution. Several scheduling policies exist which use one or the other of these factors to place the submitted processes in appropriate order in the ready queue. Each of the existing schedulers has some positive and negative implications by way of
assigning individual importance to any of the three factors. This work is an attempt to analyze the collective effect of time of arrival, size of CPU burst and priority of the process, through a logical combination of all the three. Fuzzy Better Job First (FBJF) scheduling algorithm logically integrates these three factors of a process and uses fuzzy ranking approach to determine the next most worthy job to be executed. The proposed policy thus enjoys advantages all the criteria to considerable extent.

Reference


Index Terms

Computer Science

Algorithms

Key words

Ready queue

Average waiting time(AWT)

HRRN

Membership function

Fuzzification

Defuzzification

Process