Abstract

There are many existing well known cost models for the list accessing problem. The standard cost model developed by Sleator and Tarjan is most widely used. In this paper, we have made a comprehensive study of the existing cost models and proposed a new cost model for the list accessing problem. In our proposed cost model, for calculating the processing cost of request
sequence using a singly linked list, we consider the access cost, matching cost and replacement cost. The cost of processing a request sequence is the sum of access cost, matching cost and replacement cost. We have proposed a novel method for processing the request sequence which does not consider the rearrangement of the list and uses the concept of buffering, matching, look ahead and flag bit.

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Index Terms

Computer Science Algorithms

Key words

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