

X-Sender: hector@db.stanford.edu (Unverified)
Date: Thu, 10 Feb 2000 14:09:54 -0800
To: Diane Shankle <shankle@ee.stanford.edu>
From: Hector Garcia-Molina <hector@cs.stanford.edu>
Subject: Re: Quals Question

here is my quals question... sorry for the delay...
hector

EE Qual exam Question January 2000
Hector Garcia-Molina

Consider a FIFO queue implemented with
a doubly linked list.

- (a) Describe the data structure needed
to implement this queue.
- (b) Using simple pseudo-code, write an Enqueue
procedure that adds an element to the queue.
- (c) Write a Dequeue operation that returns an
element from the queue.
- (d) Discuss what would happen in multiple processes
concurrently used your enqueue and dequeue procedures.
What can be done to prevent such conflicts?
(Just discuss briefly; do not write code.)