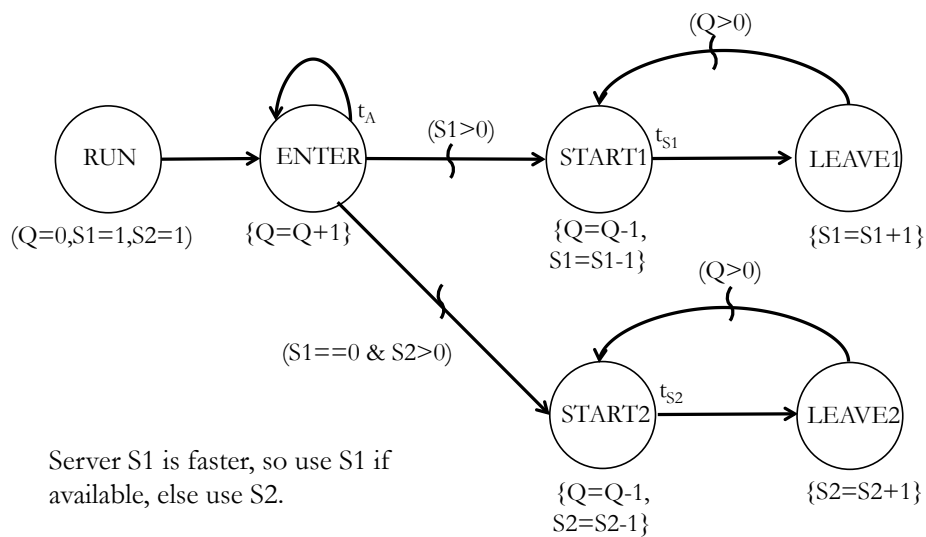


Enhanced Event Relationship Graph Model Examples

dsingham
OA3302

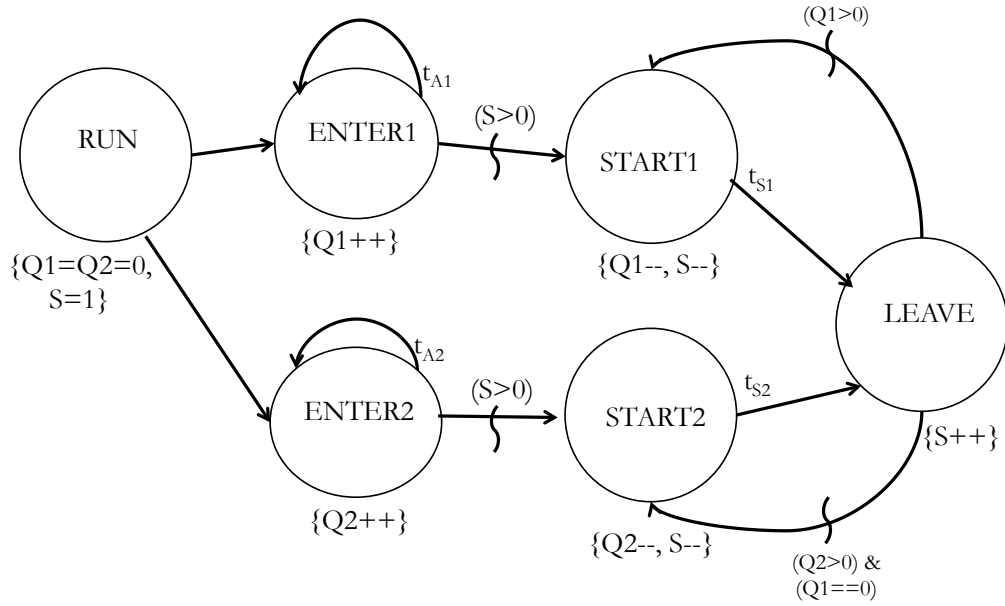
1

Resource Priority



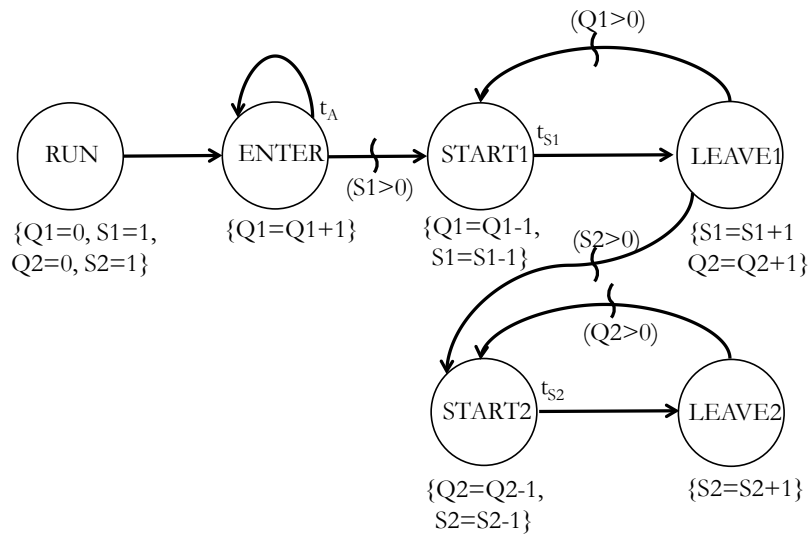
2

Non-Preemptive Priority queue (1=High, 2=Low)



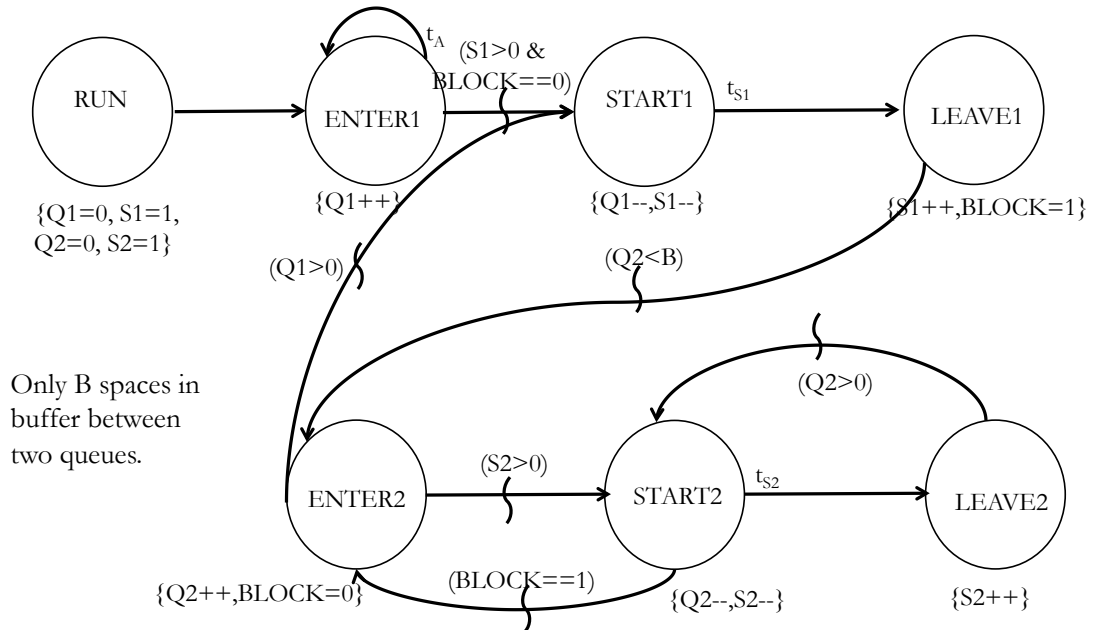
3

Tandem Queue System



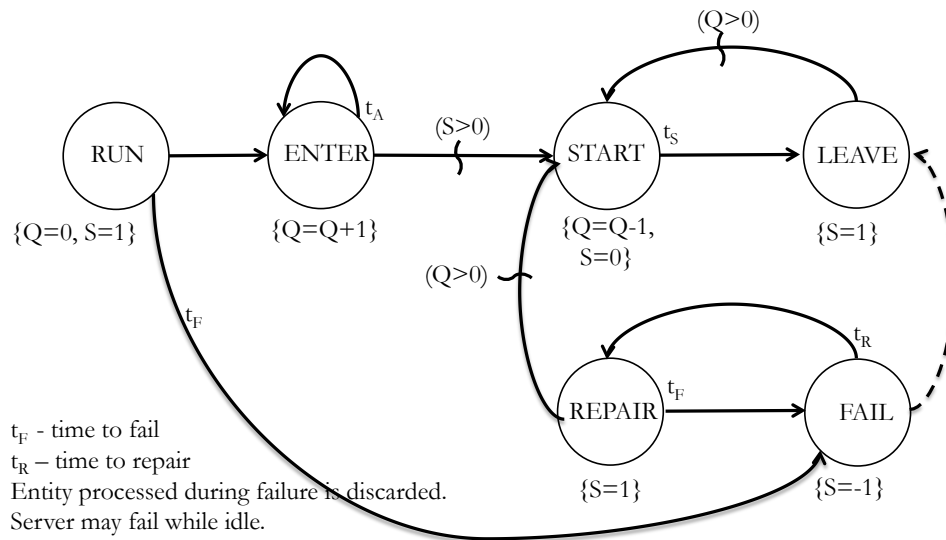
4

Tandem line (with blocking)



5

Failure model

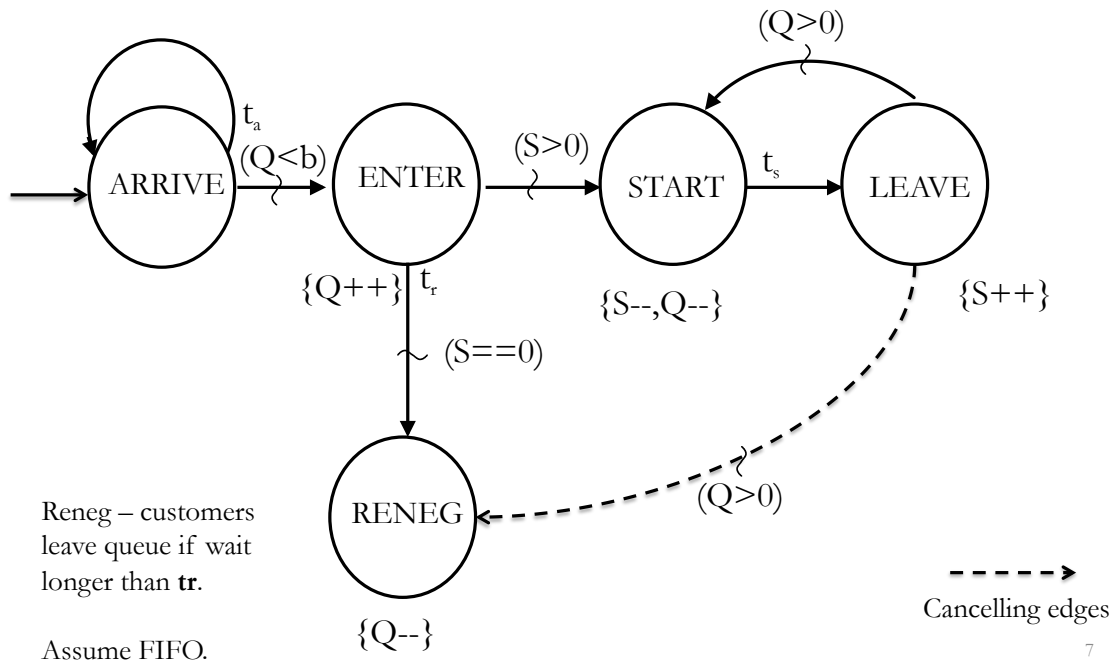


A canceling edge directed towards event A removes the next occurrence of A from the event list. If there is no A on the event list, nothing happens.

----->
 Cancelling edges

6

Reneging and Balking



7

Booleans for State Changes

- Customers enter in groups of random size
 - $C \sim \text{discrete distribution}$
 - $RND \sim U(0,1)$
- What is the distribution of t_a
 - $\{Q = Q + C\}$
 - $C = (R > 0.4) + (R > 0.8)$ when $R = RND$? (fix R)
 - $C = (RND > 0.4) + (RND > 0.8)$?



8