Mini Project #1

Create a general purpose STM system (which supports only integers (64 bits integers)) based on RingSTM algorithm. We will implement SingSW variant and the size of the ring is limited [must handle Ring Rollover] (read RingSTM paper for details).

A sample STM system using TL2 algorithm is given which can be used. Also, a Bloom filter sample code is provided also.

Remember to check your code using the bank accounts scenario that we used in assignment #3, #4, and #6. But your STM system will be evaluated using arbitrary transactions.

This is a team project (up to 2 members)

Deliverables:

1. STM System implementation + a sample program using it (C/C++ file(s))
2. Analyze the effect of the size of the Bloom filter. The sample Bloom filter code has a configurable size. Show the percentage of aborts for different Bloom filter sizes. Show the results in tabular and graph format.

Dead line:

April 4th, 2018 at 12:00 PM