



Fig : Class Diagram

Description:

TxStatus : This method is the enum that represents the status of transaction.

TxType: This method records the type of transaction read only or 2 phase locking.

Variable Value: This method stores latest and historical values of a variable and stores which transaction committed what value.

SiteStatus: This method is enum that records whether the site is up or down.

Execstatus: This method handles the execution status of instruction.

Instruction: This method handles read only objects representing a instruction.

Lock: This method is a enum representing state of lock in a variable.

LockContext: This method stores the type of transaction requesting a lock.

LockData: This method stores the state of lock on a variable.

MyRandom: This method is a reproducible random used to select random site for reading replicated variable.

Transaction: This method stores state of a transaction.

TransactionManager: This method manages all the transaction object and runs instructions for the transaction.

DataVariable: This method records all state associated with the variable at a site

DataManager: This method manages data variable represented on one site.

LockManager: This method manages lock data at a site and goes away when the site is down.

Driver : This method basically simulates the database requests.