1.Deadlock detection policy: Every time when a transaction starts, record its start time in currentTransactions hashMap. Then if this transaction is denied, check how long it is in sleep state, if it is larger than the Abort Upper Time, then throw transactionAbortedException.

Locking granularity: page level

2. With NO STEAL/FORCE, writes are flushed at commit time, so we do not need to implement logging.

The assumption that there is no crash during transaction complete process, then we can assume that all data is flushed to disk, we would not lose data during this process, so we do not need log for failure recovery.

- 3. Atomicity, durability, and Isolation are guaranteed by the simplification. We use deadlock detection to ensure atomicity and isolation, so the result of a transaction is all or nothing. With NO STEAL/FORCE and no crashes during transaction complete ensure durability that results are not lost during a failure.
- 4. We made no changes to API
- 5. Partner: Zhangjun Mei