Transaction

* optimistic lock and pessimistic lock

Optimistic locking is when you check if the record was updated by someone else before you commit the transaction.

Pessimistic locking is when you take an exclusive lock so that no one else can start modifying the record.

* how to solve the deadlock

Recap the solution steps:

Check the system\_health session for deadlocks

Create an extended event session to capture the deadlocks

Analyze the deadlock reports and graphs to figure out the problem

If it is possible to make improvements or changing the queries involved in the deadlock