ACID Properties of Transactions

Morals of the Stories
The Properties

• Atomicity
• Consistency
• Isolation
• Durability
Atomicity

- No partial completion
- Either full transaction
- Or no trace of transaction $100
Consistency

• Duty of transaction
• If DB is consistent before transaction it will be consistent after.
• May not be consistent during but that is OK
Isolation

- Updates are not visible to other transactions before transaction commits.
- OR, if another transaction Dirty Reads data, it must be killed.
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Durability

- Committed transaction must be remembered
- No excuses
- Backup and Recovery essential

$100

Savings
500
400

Checking
300
400