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| **Properties** | **Mechanism** |
| **Atomicity** | 1. **Logging (write ahead logging)** 2. **Shadow paging** |
| **Consistency** | 1. **Database consistency (integrity)**  * Not null constraint * Unique constraint * Referential constraint * Other complex check and assertions  1. **Transaction consistency**  * Responsibility of application |
| **Isolation** | **Lock:**   * Share/exclusive lock * Intention lock * Record lock * Gap lock |
| **Durability** | 1. **Logging (write ahead logging)** 2. **Shadow paging** |