

ISOLATION LEVELS IN SQL SERVER



DIRTY READS

READS UNCOMMITTED DATA
(GROSS!)

OCCURS UNDER

- READ UNCOMMITTED AKA NOLOCK (STATEMENT & TRANSACTION)

⤴️ CRAPPIEST

IMMUNE

- LITERALLY EVERY OTHER ISOLATION LEVEL



NON-REPEATABLE READS

IF YOU READ THE DATA AGAIN,
IT'S DIFFERENT

OCCURS UNDER

- READ UNCOMMITTED (STATEMENT & TRANSACTION)
- READ COMMITTED (STATEMENT & TRANSACTION)
- READ COMMITTED SNAPSHOT (TRANSACTION)

IMMUNE

- REPEATABLE READ
- SERIALIZABLE
- READ COMMITTED SNAPSHOT (STATEMENT)
- SNAPSHOT



PHANTOM READS

IF YOU READ THE DATA AGAIN,
A NEW ROW IS THERE

OCCURS UNDER

- READ UNCOMMITTED (STATEMENT & TRANSACTION)
- READ COMMITTED (STATEMENT & TRANSACTION)
- READ COMMITTED SNAPSHOT (TRANSACTION)
- REPEATABLE READ

IMMUNE

- SERIALIZABLE (BEWARE THE LOCKS IN ROWSTORE)
- READ COMMITTED SNAPSHOT (STATEMENT)
- SNAPSHOT



MOST CORRECT

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