

NORMALIZATION (1NF → 3NF)

1. Account

1NF: All atomic attributes ✓

2NF: PK is single-column; all fields depend on PK ✓

3NF: No transitive dependencies ✓

2. Goal

1NF: All atomic ✓

2NF: PK is goal_id; no partial dependencies ✓

3NF: All non-key fields depend only on PK ✓

3. HealthMetric

1NF: Atomic ✓

2NF: Single-column PK ✓

3NF: No transitive dependencies ✓

4. Room

1NF: Atomic ✓

2NF: PK = room_id ✓

3NF: title → unique, no transitive dependencies ✓

5. Booking

1NF: All values atomic ✓

2NF: PK is booking_id ✓

3NF: All non-key attributes depend ONLY on booking_id ✓

6. Registration

1NF: Atomic ✓

2NF: PK = registration_id (surrogate) ✓

3NF: No transitive dependencies ✓

Note: UNIQUE(account_id, booking_id) enforces M–M join correctness.