**Database Documentation**

Scope

Entity tables and key fields derived from JPA entities and SQL migrations in the codebase. This is a descriptive, human-readable summary.

Notes

- Actual DDL may vary by environment (MySQL vs PostgreSQL). This doc reflects the models and provided SQL scripts.

- Chat service uses Flyway migrations; inspection service provides SQL scripts to create tables.

Dealer Service

Table: Dealer

- dealerId (PK, BIGINT, AUTO)

- name (VARCHAR, NOT NULL)

- email (VARCHAR, UNIQUE, NOT NULL)

- password (VARCHAR, NOT NULL)

- location (VARCHAR, NOT NULL)

- zipcode (VARCHAR, NOT NULL)

- phone (VARCHAR, NOT NULL)

- status (VARCHAR, nullable, default 'ACTIVE')

- createdAt (TIMESTAMP)

- lastLoginAt (TIMESTAMP)

- lastActivityAt (TIMESTAMP)

Technician Service

Table: Technicians

- id (PK, BIGINT, AUTO)

- name (VARCHAR, NOT NULL)

- delearshipName (VARCHAR)

- email (VARCHAR, UNIQUE, NOT NULL)

- password (VARCHAR, NOT NULL)

- location (VARCHAR, NOT NULL)

- zipcode (VARCHAR, NOT NULL)

- yearsOfExperience (VARCHAR, NOT NULL)

Posting Service

Table: PostingDashboard

- id (PK, BIGINT, AUTO)

- name (VARCHAR)

- email (VARCHAR)

- content (TEXT/VARCHAR, NOT NULL)

- location (VARCHAR, NOT NULL)

- offerAmount (VARCHAR)

- createdAt (TIMESTAMP)

- status (ENUM or VARCHAR)

- updatedAt (TIMESTAMP)

- acceptedAt (TIMESTAMP)

- technicianName (VARCHAR)

- technicianEmail (VARCHAR)

- expectedCompletionBy (TIMESTAMP)

- vin (VARCHAR(16), optional, validated)

- auctionLot (VARCHAR)

- inspectionReportId (BIGINT)

Table: counter\_offers

- id (PK, BIGINT, AUTO)

- post\_id (BIGINT, NOT NULL, indexed)

- technician\_email (VARCHAR, NOT NULL, indexed)

- technician\_name (VARCHAR)

- original\_offer\_amount (VARCHAR, NOT NULL)

- requested\_offer\_amount (VARCHAR, NOT NULL)

- technician\_location (VARCHAR, NOT NULL)

- requested\_at (TIMESTAMP, NOT NULL, indexed)

- request\_reason (TEXT)

- technician\_notes (TEXT)

- status (ENUM: PENDING, ACCEPTED, REJECTED, WITHDRAWN, EXPIRED; indexed)

- dealer\_response\_at (TIMESTAMP)

- dealer\_response\_notes (TEXT)

- expires\_at (TIMESTAMP, indexed)

- created\_at (TIMESTAMP)

- updated\_at (TIMESTAMP)

- Unique constraint: (post\_id, technician\_email, status) to limit active duplicates

Tech Dashboard (Inspection) Service

Table: inspection\_reports

- id (PK, BIGINT, AUTO)

- post\_id (BIGINT, NOT NULL, indexed)

- technician\_id (BIGINT, NOT NULL, indexed)

- report\_title (VARCHAR)

- report\_number (VARCHAR UNIQUE)

- inspection\_date (DATE, NOT NULL)

- inspection\_start\_time (TIME)

- inspection\_end\_time (TIME)

- status (ENUM: DRAFT, IN\_PROGRESS, COMPLETED, SUBMITTED, APPROVED, REJECTED)

- overall\_condition (ENUM: EXCELLENT, GOOD, FAIR, POOR, CRITICAL)

- safety\_rating (ENUM: SAFE, NEEDS\_ATTENTION, UNSAFE, CRITICAL)

- priority\_repairs (TEXT)

- general\_notes (TEXT)

- technician\_recommendations (TEXT)

- customer\_concerns (TEXT)

- total\_files\_count (INT)

- total\_files\_size (BIGINT)

- total\_checklist\_items (INT)

- completed\_checklist\_items (INT)

- created\_at (TIMESTAMP)

- updated\_at (TIMESTAMP)

- started\_at (TIMESTAMP)

- completed\_at (TIMESTAMP)

- submitted\_at (TIMESTAMP)

- approved\_at (TIMESTAMP)

- created\_by (VARCHAR)

- updated\_by (VARCHAR)

- version (INT)

- vehicle\_make (VARCHAR)

- vehicle\_model (VARCHAR)

- vehicle\_year (INT)

- vehicle\_mileage (INT)

- vehicle\_color (VARCHAR)

- vin\_number (VARCHAR)

Table: inspection\_checklist\_items

- id (PK, BIGINT, AUTO)

- inspection\_report\_id (BIGINT, FK -> inspection\_reports)

- category (ENUM: EXTERIOR, INTERIOR, ENGINE, TRANSMISSION, BRAKES, SUSPENSION, ELECTRICAL, SAFETY, UNDERCARRIAGE, TEST\_DRIVE)

- item\_name (VARCHAR)

- item\_order (INT)

- is\_checked (BOOLEAN)

- condition\_rating (ENUM: EXCELLENT, GOOD, FAIR, POOR, FAILED, NOT\_INSPECTED)

- working\_status (ENUM: WORKING, NEEDS\_REPAIR, NOT\_WORKING)

- priority\_level (ENUM: LOW, MEDIUM, HIGH, CRITICAL)

- repair\_description (TEXT)

- remarks (TEXT)

- technician\_notes (TEXT)

- has\_photos (BOOLEAN)

- photo\_count (INT)

- created\_at (TIMESTAMP)

- updated\_at (TIMESTAMP)

- inspected\_at (TIMESTAMP)

Table: inspection\_files

- id (PK, BIGINT, AUTO)

- inspection\_report\_id (BIGINT, FK -> inspection\_reports)

- checklist\_item\_id (BIGINT, FK -> inspection\_checklist\_items)

- original\_filename (VARCHAR)

- stored\_filename (VARCHAR)

- file\_path (VARCHAR)

- file\_size (BIGINT)

- content\_type (VARCHAR)

- file\_category (ENUM: IMAGE, VIDEO, AUDIO, DOCUMENT, OTHER)

- inspection\_category (ENUM matching checklist categories)

- description (VARCHAR)

- tags (VARCHAR, comma-separated)

- file\_hash (VARCHAR)

- is\_processed (BOOLEAN)

- is\_virus\_scanned (BOOLEAN)

- is\_valid (BOOLEAN)

- thumbnail\_path (VARCHAR)

- uploaded\_at (TIMESTAMP)

- processed\_at (TIMESTAMP)

Table: inspection\_vehicle\_details

- id (PK, BIGINT, AUTO)

- inspection\_report\_id (BIGINT, FK -> inspection\_reports)

- vin\_number (VARCHAR)

- license\_plate (VARCHAR)

- make (VARCHAR)

- model (VARCHAR)

- year (INT)

- trim\_level (VARCHAR)

- engine\_type (VARCHAR)

- transmission\_type (VARCHAR)

- fuel\_type (VARCHAR)

- mileage (INT)

- color\_exterior (VARCHAR)

- color\_interior (VARCHAR)

- accident\_history (ENUM: NONE, MINOR, MAJOR, UNKNOWN)

- service\_history\_available (BOOLEAN)

- previous\_owner\_count (INT)

- inspection\_location (VARCHAR)

- weather\_conditions (VARCHAR)

- created\_at (TIMESTAMP)

- updated\_at (TIMESTAMP)

Chat Service (Flyway SQL)

Table: rooms

- id (PK, BIGSERIAL)

- room\_uid (VARCHAR UNIQUE, indexed)

- title (VARCHAR)

- created\_at (TIMESTAMP)

Table: room\_participants

- id (PK, BIGSERIAL)

- room\_uid (VARCHAR, FK -> rooms.room\_uid)

- display\_name (VARCHAR)

- last\_seen\_at (TIMESTAMP)

- Indexes: (room\_uid, display\_name), (room\_uid, last\_seen\_at)

Table: messages

- id (PK, BIGSERIAL)

- room\_uid (VARCHAR, FK -> rooms.room\_uid)

- sender\_name (VARCHAR)

- type (ENUM message\_type: TEXT, SYSTEM, TYPING)

- content (TEXT)

- created\_at (TIMESTAMP)

- Indexes: (room\_uid, id), (room\_uid, created\_at)

Table: call\_logs

- id (PK, BIGSERIAL)

- room\_uid (VARCHAR, FK -> rooms.room\_uid)

- caller\_name (VARCHAR)

- callee\_name (VARCHAR)

- started\_at (TIMESTAMP)

- ended\_at (TIMESTAMP NULL)

- end\_reason (VARCHAR)

- Index: (room\_uid, started\_at)

Table: signals (when enabled)

- id (PK, BIGSERIAL)

- room\_uid (VARCHAR, FK -> rooms.room\_uid)

- from\_name (VARCHAR)

- to\_name (VARCHAR NULL)

- signal\_type (ENUM signal\_type: OFFER, ANSWER, CANDIDATE, HANGUP)

- payload (MEDIUMTEXT)

- created\_at (TIMESTAMP)

- Index: (room\_uid, created\_at)

References

- See Backend/tech-dashboard/\*.sql for inspection schema scripts.

- See Backend/chat-service/src/main/resources/db/migration for chat schema migrations.