

# Vehicle vault

## Data Dictionary

### Users (unified for buyers & sellers — role-based)

Field Name	Data Type	Description	Required	Notes
user_id	BIGINT	Unique user identifier	Yes	PK, Auto-increment
email	VARCHAR(120)	Login email	Yes	UNIQUE, validated
password_hash	VARCHAR(255)	Hashed password	Yes	bcrypt/argon2
full_name	VARCHAR(100)	Full name	Yes	
phone	VARCHAR(20)	Contact number	Yes	UNIQUE, International format
role	ENUM('buyer','seller','dealer','admin')	Primary role (can be multi via separate table if needed)	Yes	Default: 'buyer'
user_type	ENUM('private','dealer')	Private seller vs Dealership	Yes	For sellers only
profile_picture	VARCHAR(255)	URL to profile photo	No	S3 / Cloudinary path
location_city	VARCHAR(50)	City	No	For better matching

### Vehicles / Car Listings (core entity — every ad is tied to one)

Field Name	Data Type	Description	Required
listing_id	BIGINT	Unique listing/ad ID	Yes
seller_id	BIGINT	Who posted the ad	Yes
make	VARCHAR(50)	Brand (Maruti, Toyota, BMW...)	Yes
model	VARCHAR(100)	Model name	Yes
variant	VARCHAR(100)	Trim / variant (e.g., VXI, M Sport)	No
manufacturing_year	SMALLINT	Year of manufacture	Yes
registration_year	SMALLINT	Year first registered	No

## VehicleMedia (photos, 360° views, videos)

Field Name	Data Type	Description	Required
media_id	BIGINT	Unique media item	Yes
listing_id	BIGINT	Related listing	Yes
media_type	ENUM('photo','360_view','video','virtual_tour')	Type	Yes
file_url	VARCHAR(255)	Cloud storage URL	Yes
is_primary	BOOLEAN	Main thumbnail?	Yes
uploaded_at	TIMESTAMP	Upload time	Yes

## VehicleInspections / Reports (AI + third-party condition reports)

inspection_id	BIGINT	Unique inspection record	Yes
listing_id	BIGINT	Related car	Yes
inspector_type	ENUM('AI','third_party','self_reported')	Source of report	Yes
report_url	VARCHAR(255)	PDF / detailed report link	No
overall_score	DECIMAL(3,1)	e.g., 8.7/10	No
accident_history	TEXT	Accidents / damage summary	No
maintenance_score	DECIMAL(3,1)	Maintenance quality	No
verified_by	VARCHAR(100)	Third-party name (e.g., GoMechanic)	No
inspected_at	DATE	Inspection date	Yes

## 2. Workflow / Flowchart (Main End-to-End Process)

