# Veterinary Clinic – Core Database Schema (Draft for Review)

Foundational schema to support Visit Entry, Admin Completion, Preventive Care, Visit Dashboard, POS Sync, Reminders, Network Ingest, and Certificates. Types are MySQL 8‑friendly.

## 1) Owners & Mobiles

owners

• id — BIGINT UNSIGNED PK AI

• first\_name — VARCHAR(60) NOT NULL

• middle\_name — VARCHAR(60) NULL

• last\_name — VARCHAR(60) NOT NULL

• locality — VARCHAR(120) NULL

• address — VARCHAR(255) NULL

• status — ENUM('active','provisional','merged') DEFAULT 'active'

• created\_at — DATETIME NOT NULL

• updated\_at — DATETIME NOT NULL

owner\_mobiles

• id — BIGINT UNSIGNED PK AI

• owner\_id — BIGINT UNSIGNED NOT NULL FK→owners.id ON DELETE CASCADE

• mobile\_e164 — VARCHAR(20) NOT NULL

• is\_primary — TINYINT(1) NOT NULL DEFAULT 0

• is\_verified — TINYINT(1) NOT NULL DEFAULT 0

• created\_at — DATETIME NOT NULL

Indexes: UNIQUE(owner\_id, mobile\_e164), INDEX(mobile\_e164), CHECK one primary per owner (app logic).

## 2) Species & Breeds (Reference)

species

• id — BIGINT UNSIGNED PK AI

• name — VARCHAR(40) UNIQUE NOT NULL

breeds

• id — BIGINT UNSIGNED PK AI

• species\_id — BIGINT UNSIGNED NOT NULL FK→species.id ON DELETE CASCADE

• name — VARCHAR(80) NOT NULL

• UNIQUE — (species\_id, name)

## 3) Pets

• id — BIGINT UNSIGNED PK AI

• owner\_id — BIGINT UNSIGNED NOT NULL FK→owners.id ON DELETE CASCADE

• unique\_id — CHAR(6) NOT NULL UNIQUE (format YY####)

• pet\_name — VARCHAR(80) NULL

• species\_id — BIGINT UNSIGNED NULL FK→species.id

• breed\_id — BIGINT UNSIGNED NULL FK→breeds.id

• gender — ENUM('male','female','unknown') DEFAULT 'unknown'

• dob — DATE NULL

• age\_years — TINYINT UNSIGNED NULL

• age\_months — TINYINT UNSIGNED NULL

• microchip — VARCHAR(32) NULL

• notes — TEXT NULL

• status — ENUM('active','provisional','archived','merged') DEFAULT 'active'

• created\_at — DATETIME NOT NULL

• updated\_at — DATETIME NOT NULL

Indexes: INDEX(owner\_id), INDEX(unique\_id).

## 4) Counters (ID Generators)

year\_counters

• id — INT PK AI

• year\_two — CHAR(2) NOT NULL UNIQUE

• last\_seq — INT UNSIGNED NOT NULL DEFAULT 0

• updated\_at — DATETIME NOT NULL

Usage: transaction with SELECT ... FOR UPDATE; unique\_id = CONCAT(year\_two, LPAD(last\_seq+1, 4, '0')).

visit\_seq\_counters

• id — BIGINT PK AI

• pet\_id — BIGINT UNSIGNED NOT NULL UNIQUE FK→pets.id ON DELETE CASCADE

• last\_visit\_seq — INT UNSIGNED NOT NULL DEFAULT 0

• updated\_at — DATETIME NOT NULL

Usage: per-pet v#### sequence.

## 5) Visits

• id — BIGINT UNSIGNED PK AI

• pet\_id — BIGINT UNSIGNED NOT NULL FK→pets.id ON DELETE CASCADE

• visit\_date — DATE NOT NULL

• visit\_seq — INT UNSIGNED NOT NULL COMMENT 'v#### per pet'

• status — ENUM('open','closed') DEFAULT 'open'

• source — ENUM('android','web','pos-only','ingest','email','whatsapp') DEFAULT 'web'

• reason — VARCHAR(200) NULL

• remarks — TEXT NULL

• next\_visit — DATE NULL

• created\_by — BIGINT NULL

• created\_at — DATETIME NOT NULL

• updated\_at — DATETIME NOT NULL

Unique Index: UNIQUE(pet\_id, visit\_date, visit\_seq).

## 6) Documents (Files Index)

• id — BIGINT UNSIGNED PK AI

• patient\_unique\_id — CHAR(6) NOT NULL

• pet\_id — BIGINT UNSIGNED NOT NULL FK→pets.id ON DELETE CASCADE

• visit\_id — BIGINT UNSIGNED NULL FK→visits.id ON DELETE SET NULL

• type — ENUM('photo','prescription','doc','xray','lab','usg','invoice','vaccine','deworm','tick','consent','referral','qrcode','barcode','medscan') NOT NULL

• subtype — VARCHAR(60) NULL

• path — VARCHAR(255) NOT NULL

• filename — VARCHAR(180) NOT NULL

• source — ENUM('android','web','pos','ingest','email','whatsapp') NOT NULL

• ref\_id — VARCHAR(60) NULL

• seq — SMALLINT UNSIGNED NULL

• mime — VARCHAR(80) NULL

• size\_bytes — INT UNSIGNED NULL

• captured\_at — DATETIME NOT NULL

• checksum\_sha1 — CHAR(40) NULL

• created\_at — DATETIME NOT NULL

Indexes: INDEX(pet\_id, captured\_at), INDEX(visit\_id), INDEX(type, captured\_at), INDEX(ref\_id), INDEX(patient\_unique\_id).

## 7) Preventive Care

preventive\_templates (seeded)

• id — BIGINT PK AI

• species\_id — BIGINT UNSIGNED NULL

• type — ENUM('vaccine','deworm','tickflea') NOT NULL

• subtype — VARCHAR(80) NULL

• json\_rules — JSON NOT NULL

• active — TINYINT(1) NOT NULL DEFAULT 1

preventive\_plans

• id — BIGINT PK AI

• pet\_id — BIGINT UNSIGNED NOT NULL FK→pets.id ON DELETE CASCADE

• type — ENUM('vaccine','deworm','tickflea') NOT NULL

• status — ENUM('active','paused') DEFAULT 'active'

• created\_at — DATETIME NOT NULL

preventive\_items

• id — BIGINT PK AI

• plan\_id — BIGINT UNSIGNED NOT NULL FK→preventive\_plans.id ON DELETE CASCADE

• type — ENUM('vaccine','deworm','tickflea') NOT NULL

• subtype — VARCHAR(80) NULL

• due\_date — DATE NOT NULL

• window\_start — DATE NULL

• window\_end — DATE NULL

• status — ENUM('scheduled','overdue','done','skipped') DEFAULT 'scheduled'

• reminder\_state — ENUM('none','pending','sent','confirmed') DEFAULT 'pending'

• last\_reminder\_at — DATETIME NULL

• visit\_id — BIGINT UNSIGNED NULL FK→visits.id ON DELETE SET NULL

• notes — VARCHAR(180) NULL

• created\_at — DATETIME NOT NULL

preventive\_events

• id — BIGINT PK AI

• item\_id — BIGINT UNSIGNED NULL FK→preventive\_items.id ON DELETE SET NULL

• pet\_id — BIGINT UNSIGNED NOT NULL FK→pets.id ON DELETE CASCADE

• date\_given — DATE NOT NULL

• visit\_id — BIGINT UNSIGNED NULL FK→visits.id ON DELETE SET NULL

• captured\_by — ENUM('android','web','pos','ingest','email','whatsapp') NOT NULL

• dose\_ml — DECIMAL(5,2) NULL

• route — VARCHAR(20) NULL

• site — VARCHAR(40) NULL

• manufacturer — VARCHAR(80) NULL

• batch — VARCHAR(40) NULL

• expiry — DATE NULL

• created\_at — DATETIME NOT NULL

## 8) POS Integration

pos\_invoices

• id — BIGINT PK AI

• pet\_id — BIGINT UNSIGNED NOT NULL FK→pets.id ON DELETE CASCADE

• visit\_id — BIGINT UNSIGNED NULL FK→visits.id ON DELETE SET NULL

• unique\_id — CHAR(6) NOT NULL

• invoice\_id — VARCHAR(40) NOT NULL UNIQUE

• sale\_datetime — DATETIME NOT NULL

• total\_amount — DECIMAL(10,2) NULL

• source — ENUM('webhook','poll') NOT NULL

• created\_at — DATETIME NOT NULL

pos\_invoice\_items

• id — BIGINT PK AI

• invoice\_db\_id — BIGINT UNSIGNED NOT NULL FK→pos\_invoices.id ON DELETE CASCADE

• product\_code — VARCHAR(60) NULL

• product\_name — VARCHAR(120) NOT NULL

• quantity — DECIMAL(10,2) NOT NULL

• unit\_price — DECIMAL(10,2) NULL

## 9) Reminders

• id — BIGINT PK AI

• pet\_id — BIGINT UNSIGNED NOT NULL FK→pets.id ON DELETE CASCADE

• owner\_id — BIGINT UNSIGNED NOT NULL FK→owners.id ON DELETE CASCADE

• type — ENUM('visit','vaccine','deworm','tickflea','custom') NOT NULL

• subtype — VARCHAR(60) NULL

• due\_date — DATE NOT NULL

• status — ENUM('pending','sent','snoozed','skipped','failed') DEFAULT 'pending'

• channel — ENUM('whatsapp','sms','both') DEFAULT 'whatsapp'

• last\_attempt\_at — DATETIME NULL

• attempts\_count — TINYINT UNSIGNED NOT NULL DEFAULT 0

• created\_at — DATETIME NOT NULL

reminder\_templates: id, type, subtype, channel, language, template\_text, updated\_at.

## 10) Certificates & Templates

cert\_templates

• id — BIGINT PK AI

• name — VARCHAR(120) NOT NULL

• category — ENUM('certificate','report','letter') NOT NULL

• status — ENUM('active','inactive') DEFAULT 'active'

• html — LONGTEXT NOT NULL

• updated\_at — DATETIME NOT NULL

cert\_generated

• id — BIGINT PK AI

• template\_id — BIGINT UNSIGNED NOT NULL FK→cert\_templates.id ON DELETE RESTRICT

• pet\_id — BIGINT UNSIGNED NOT NULL FK→pets.id

• visit\_id — BIGINT UNSIGNED NULL FK→visits.id

• path — VARCHAR(255) NOT NULL

• filename — VARCHAR(160) NOT NULL

• created\_by — BIGINT UNSIGNED NULL

• created\_at — DATETIME NOT NULL

## 11) Users & Roles (basic)

users: id, name, email, password\_hash, role ENUM('frontdesk','doctor','admin'), created\_at, updated\_at.

api\_tokens (if JWT/Personal tokens): id, user\_id, token, last\_used\_at, revoked.

## 12) Indexing & Performance

- Fast search: INDEX on owner\_mobiles.mobile\_e164, pets.unique\_id, pets.owner\_id.  
- Documents heavy read: INDEX(pet\_id, captured\_at), partial index on type.  
- Preventive due: INDEX(preventive\_items.due\_date, status).  
- Reminders: INDEX(due\_date, status).  
- POS invoices: UNIQUE(invoice\_id), INDEX(unique\_id).

## 13) Time & Clinic Day

- Store timestamps in UTC; keep clinic-day window (e.g., 04:00–03:59 IST) in config.  
- Visits auto-close at clinic-day end.