**What “auto-map” should do**

1. **Confident auto‑attach (no human needed)**
   * We auto‑attach an upload to a visit when ALL are true:
     + **UID is present** (from form field or filename).
     + **Date is reliable** (prefer captured\_at; else EXIF; else parse ddmmyy prefix in filename; else server upload date).
     + **Same‑day match**: file’s date == visit\_date.
     + **Pet consistency**: if pet\_id is known on the doc, it matches the pet for the UID.
     + **Type valid** (in our enum/whitelist: rx|photo|doc|xray|lab|usg|invoice).
     + **Not a duplicate** (same checksum + size already on that visit).
   * If a **visit for that UID/date doesn’t exist**, we **create one** and attach.
2. **Low‑confidence → “Needs Review” queue (admin decision)**
   * Any miss on the rules above (ambiguous date, UID missing or multiple candidates, type invalid, checksum duplicate with different name, conflicting pet) goes to a **Review queue** instead of auto‑attaching.
   * Admin can: **Attach**, **Reassign** (pick UID/date/visit), **Ignore/Archive**, or **Delete** (if allowed).

**Why this is safe**

* Auto only when unambiguous; everything else surfaces for review.
* Idempotent: rerunning won’t double‑attach due to checksum/visit checks.
* Reversible: every auto action is logged with who/when and a one‑click **Undo**.

**Settings (so you keep control)**

* **Auto‑map orphan docs**: on/off (you already have this).
* **Auto‑create visit if missing**: on/off (defaults **on**).
* **Backfill window**: only auto for files within **N days** of today (e.g., 7–14). Older → Review queue.
* **Time zone**: clinic TZ to interpret “day”.
* **Allowed types**: editable list (future).

**Data sources & precedence (for the date)**

1. captured\_at column (explicit)
2. EXIF DateTimeOriginal (for images)
3. Filename prefix ddmmyy-... (your current convention)
4. Server created\_at (as a last resort)

* If 3+ sources disagree → Review queue (don’t guess).

**Duplicate and naming safeguards**

* **Checksum dedupe** per visit.
* If the generated filename would collide (…-03.jpg vs …-03.png), we bump the sequence (…-04.\*) rather than overwriting.
* Keep original filename in metadata for traceability.

**Review queue UX (simple & effective)**

* **Table**: thumbnail/name, detected UID/date/type, confidence notes, checksum, size, “why in review”.
* **Actions** per row:
  + Attach to “Visit #1 (11‑08‑2025)” (default suggestion)
  + Change UID/date → auto‑suggest visits or “Create visit & attach”
  + Ignore/Archive (keeps file but marks handled)
  + Delete (if permitted)
* **Bulk actions** for common cases (e.g., select 5 photos → attach to today’s visit for UID 250001).

**Audit & undo**

* Log entry for every auto‑attach and admin action: who, when, doc\_id, visit\_id, reason.
* **Undo** button per action: clears visit\_id (or restores previous), re‑queues if needed.

**Performance/ops**

* Mapping runs **right after** each upload (small, scoped update) and can also run as a **nightly sweep** for safety.
* All updates limited by uid + date and visit\_id IS NULL → index these columns (you already index most).

**Edge‑cases (how we’ll handle them)**

* **Multiple visits same day**: attach to the **most recent** visit for that date (Visit #2 over #1). If that’s risky for a clinic, put a toggle to always prefer Visit #1 or always go to Review when >1 exists.
* **Backdated scans**: older than N‑day window → Review.
* **UID typo in filename**: if form UID conflicts with filename UID → Review.
* **Wrong pet merged later**: you’ll have Undo + Reassign, and we can add a “Recompute for this UID/date” button to mass‑move if you merge records.

**tl;dr**

* **Auto when unambiguous**, **queue when unsure**, **create visit if missing**, **log everything with undo**.
* A couple of lightweight settings keep it clinic‑friendly and safe.

If you’re okay with this, I’ll implement in this order (no surprise changes):

1. **Settings**: add auto\_create\_visit + backfill\_days.
2. **Mapper**: upgrade current auto‑map to respect the rules above.
3. **Review queue**: minimal admin page with the actions.
4. **Undo/Audit**: simple action log + undo endpoint.

Say the word and I’ll prep the drop‑in files for step 1.