

# Butter Money — Take-home Assignment (1 day)

## Project: Multi-Bank **Policy Comparator**

**Context.** Banks publish MITC (Most Important Terms & Conditions) for home loans. The wording, structure, and formats vary (text/PDF/tables). Your task is to turn these diverse docs into a simple, comparable view that helps a non-technical teammate understand “what’s the same, what’s different, and what’s missing.”

**Your mission.** Build a small app that: 1) **Ingests** 3–4 bank MITC documents (we’ll provide a pack that includes text and at least one PDF), 2) **Extracts & normalizes** key facts into a structure you design, and 3) **Presents a side-by-side comparison** with short, human-readable explanations and the ability to drill into the underlying evidence.

You are free to use any frameworks, libraries, and LLMs. Keep the scope pragmatic and shippable in 1–2 days.

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## User stories (lightweight)

- **Upload:** As an ops analyst, I upload a policy for Bank X and see a preview of the normalized data with any warnings.
  - **Compare:** I pick 3+ banks and see a compact table organized by sections you think matter most. Cells show whether items are **Same / Diff / Missing / Suspect**.
  - **Trace:** When I click a cell, I see the normalized value, a brief explanation, and a pointer to the **exact evidence** (e.g., file + line/page snippet).
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## Inputs

- We’ll share 3–4 MITC files from different banks (mixed formats, small inconsistencies). Assume INR amounts and percentages appear in common Indian notations.

## Output/UI

- A simple, clear UI (single page or a couple of screens) that demonstrates the flows above. Focus on **readability and traceability** over design polish.
- Avoid hard-coding bank names or positions—assume new docs could arrive later.

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## Deliverables

- **Git repo** with code and a **detailed README** explaining how to run locally (scripts or Docker), configuration, and any prerequisites.
  - **Short walkthrough video** (3–5 min) showing upload → comparison → evidence drill-down. A link in the README is fine.
  - A small **test suite** covering a few core behaviors you consider critical.
  - (Optional) An export of your comparison (CSV/JSON) for our review.
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## Timebox & expectations

- Aim for ~6-8 hours across 1–2 days. Ship a minimal but cohesive slice end-to-end.
  - Keep keys out of the repo and make it easy to plug in through env files.
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## Hints (not requirements)

- **Evidence matters.** Keep a reference to the source (filename + line range, or PDF page + snippet) **at field level**.
  - **Normalize units & language.** Expect ₹/Rs, L/Lac, Cr, %, and synonyms (e.g., *credit score* ↔ *CIBIL*, *pre-closure* ↔ *foreclosure*, *tenure* ↔ *term*).
  - **Conflicts happen.** Detect overlapping or contradictory bands (e.g., LTV thresholds) and surface them as **Suspect** rather than guessing.
  - **Dates.** If a doc mentions an “updated/effective” date, prefer that over “today.” Keep time zone consistent.
  - **Scope choices.** Choose **5–7 sections** you believe are most useful to a loan ops team (e.g., Fees & Charges, Prepayment/Foreclosure, LTV bands, Eligibility, Tenure, Interest-reset/communication, Documents required, Grievance). Explain your picks in the README.
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## What we'll look for

- **Product sense:** sensible sections, clear comparison signals, helpful copy.
- **Engineering judgment:** simple, extensible data model; clean boundaries between ingest/extract/normalize/compare.

- **Traceability & correctness:** evidence pointers, reasonable normalization, graceful handling of ambiguity.
  - **Pragmatism with LLMs:** prompts (if any), fallback/stub strategy.
  - **DX & quality:** README clarity, reproducible run, small but meaningful tests, commit hygiene.
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## Submission

- Share the repository link and the README. Include a link to your video walkthrough.
- If you documented trade-offs/assumptions (recommended), add a brief **DECISIONS.md**.

You don't need to boil the ocean—prioritize the comparison experience and make thoughtful calls where the documents are ambiguous. We care about how you think, not just what you ship.