IF Insurance AI Demo — User Guide

Version: 1.0

Overview

The Insurance Claims Analyzer helps analyze claims and invoices against policy contracts and evaluate images with built-in fraud detection.

- Claims document extraction and comparison
- Invoice support (PDF and image invoices)
- Fraud detection for documents and images
- Image damage analysis with false positive/negative scoring
- Exportable JSON reports

Requirements

- Python 3.10+
- OpenAI API key (required)
- Anthropic API key (optional)
- Recommended: `pandoc` for Markdown → PDF export

Setup

1. Install and run

   ```
   cd /home/julian/dev/hobby/insurance-demo
   python -m venv .venv
   source .venv/bin/activate
   pip install -r requirements.txt
   streamlit run Home.py
   ```

2. Create a `.env` file

   ```
   OPENAI_API_KEY=your_openai_api_key
   ANTHROPIC_API_KEY=your_anthropic_api_key   # optional
   ```

Data Folder

Place documents and images under `data/` (subfolders supported): - PDFs: claims, invoices, policy contracts - Images: `.jpg`, `.jpeg`, `.png`

Pages

Claims Check

- Extract data from Claim, Invoice, Policy
- Compare side-by-side with discrepancies and recommendations
- Image invoices supported (analyze authenticity via Fraud Detection)

Workflow: 1. Add API key (sidebar or `.env`). 2. Use demo files or upload PDFs/images. 3. Extract Claim/Invoice/Policy. 4. Optional: include saved image analyses. 5. Compare to see mismatches and export report.

Fraud Detection (inside Claims Check)

- Select any file from `data/` (PDF/image) via sidebar
- Detect doctored/fraudulent content and manipulation
- Output: risk score, authenticity, indicators, recommendations
- Export JSON report

Image Detection

- Analysis modes: Comprehensive, Damage Assessment, Fraud Detection, False Positive/Negative, OCR
- Use demo images from `data/` or upload your own
- Save analyses for use in Claims Check
- Visualize severity/accuracy and export results

Documentation

- Download this guide (Markdown/PDF)
- Steps to regenerate PDF locally

API Keys

- OpenAI required; Anthropic optional
- Load from `.env` and/or override in sidebars

Exports

- Claims comparison: JSON
- Image analysis: JSON or text
- Fraud detection: JSON
- User Guide: `docs/if-insurance-ai-demo-user-guide.(md|pdf)`

Regenerate PDF

If `pandoc` is installed:

```
cd /home/julian/dev/hobby/insurance-demo
source .venv/bin/activate
pandoc docs/if-insurance-ai-demo-user-guide.md -o docs/if-insurance-
ai-demo-user-guide.pdf
```

If missing (Debian/Ubuntu):

```
sudo apt-get update && sudo apt-get install -y pandoc
```

Troubleshooting

- API key required: add via `.env` or sidebar
- PDF not generated: install `pandoc`
- Slow on large files: try smaller inputs
- Anthropic model without key: switch to OpenAI or add key

Privacy & Security

- Avoid uploading sensitive data without proper agreements/consent
- Consider redaction of personal data

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