Kabelo's TAX Consulting Doc App

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A desktop-friendly tool to convert legal/finance/tax documents into:

- **Plain-English rewrites** (faithful, easy to understand)
- **Bullet-point summaries** (by section, preserving legal context)

The app supports batch processing, parallel LLM calls, and a modern GUI.

S Features

- **Input formats:** PDF, DOCX, TXT
- **Outputs:** Plain-English + Summary in DOCX and/or TXT (optional PDF)
- **Batch mode:** Process all files in a folder (recursive)
- **Parallel processing:** `--workers N` for speed
- **Modern GUI:** Dark/light themes, toasts, drag-and-drop (optional)
- **Robust prompts:** Section-preserving, safe chunking around token limits
- **Logging:** Per-run log in your output folder

Requirements

- **Python 3.10+**
- A valid **OpenAI API key**
- Python packages (installed via 'requirements.txt' or automatically by the launcher):
- 'openai', 'python-docx', 'pdfplumber', 'PyPDF2', 'reportlab', 'tqdm'
- GUI extras: `ttkbootstrap`
- For macOS GUI: Tkinter is included with most Python.org builds

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Folder Layout (recommended)

```
your-project/
├─ legal_converter.py
⊢ Myinterface.py
                        # macOS/Linux launcher
⊦— run_gui.sh
⊦— launch_gui.py
                          # cross-platform Python launcher
├─ requirements.txt
                       # your API key (NOT committed)
⊦—.env
                      # put your input docs here
├— in/
└─ out/
                       # outputs will appear here
***
Configure your API key (two options)
Option A — `.env` file (recommended)
Create a file named `.env` **in the project root** with:
OPENAI_API_KEY= Past the API Key here
...
Ensure your code loads it (already included in recent scripts):
```python
from dotenv import load_dotenv
load_dotenv()
```

```
Install helper once:
```bash
pip install python-dotenv
•••
Option B — Environment variable (macOS/Linux)
```bash
echo 'export OPENAI_API_KEY="sk-REPLACE_WITH_YOUR_KEY"' >> ~/.zshrc
source ~/.zshrc
% Setup
1) Create and activate a virtual environment
macOS / Linux
```bash
python3 -m venv .venv
source .venv/bin/activate
...
**Windows (PowerShell)**
```powershell
py -m venv .venv
. \\ \label{eq:convergence} . \\ \label{eq:conve

```

```
2) Install dependencies
```bash
pip install -r requirements.txt
GUI:
pip install ttkbootstrap tkinterdnd2 python-dotenv
Run the App (GUI)
Option 1 — Modern GUI (recommended)
```bash
activate venv first
python3 Myinterface.py
• Pick **Input** and **Output** folders.
• Select **Model** (default: `gpt-4o-mini`), **Formats** (`docx,txt`), and **Workers**
 (e.g., 3).
• Click **Run Conversion**.
Option 2 — Shell launcher (macOS/Linux)
```bash
chmod +x run_gui.sh
./run_gui.sh
Option 3 — Universal Python launcher
```bash
python3 Myinterface.py
```

...

Works on macOS/Windows. Creates `.venv` if missing, installs requirements, launches the GUI.

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# **Quick Smoke Test**

Create a tiny input file:

```bash

mkdir -p in out

printf "SECTION 1. TERM. This Agreement begins on the Effective Date." > in/demo.txt python3 Myinterface.py

choose in=./in, out=./out, then Run

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Outputs: `out/demo/demo_plainEnglish.docx/.txt` and `out/demo/demo_summary.docx/.txt` (names may vary).

Command-line (batch) mode

You can also run the converter without the GUI:

```bash

```
python3 legal_converter.py --input "/absolute/path/to/in" --output
"/absolute/path/to/out" --model gpt-4o-mini --formats docx,pdf --workers 3
...
Notes:
```

- Input is \*\*recursive\*\*; all `.pdf', `.docx`, `.txt` inside are processed.
- Use absolute paths to avoid "folder not found" issues.

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## **(2)** Key Options

- `--input`: Input folder (recursive discovery)
- `--output`: Output root folder
- `--model`: LLM model (e.g., `gpt-4o-mini`, `gpt-4o`)
- `--formats`: `docx,txt` (and `pdf if `reportlab` installed)
- `--workers`: Parallel file workers (1–16; beware of API rate limits)

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# **Troubleshooting**

\*\*"API key is not set / missing"\*\*

- Ensure `.env` exists and contains `OPENAI\_API\_KEY=...`
- Or export in the shell: `export OPENAI\_API\_KEY="sk-..."`
- Restart the app/Terminal after changes

\*\*"No input files found"\*\*

- Use absolute paths; confirm the folder really has `.pdf/.docx/.txt`
- macOS/Linux: `find ./in -type f \( -iname "\*.pdf" -o -iname "\*.docx" -o -iname "\*.txt" \)`

\*\*"quote>" prompt in Terminal\*\*

• You're missing a closing quote in a command; press \*\*Ctrl+C\*\* and retype with matching quotes.

\*\*Permissions on macOS\*\*

- 'chmod +x run\_gui.sh'
- If a downloaded file is blocked: `xattr -d com.apple.quarantine <file>`

- \*\*Tkinter / ttkbootstrap missing\*\*
- Install: 'pip install ttkbootstrap'
- If `\_tkinter` errors on macOS, install Python from python.org or update your Tk.

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# **Support**

If you hit an error, copy the \*\*last 20 lines\*\* from the log panel or `out/processing.log` and share them with me [email: Ratshefola.kt@outlook.com]| Include:

- Your OS (macOS/Windows)
- Python version ('python3 --version')
- The exact command you ran