📝 ICT_Notepad

A personal web app to log, manage, and review ICT-style PD Arrays & Levels for trading.
All data is stored locally in a lightweight SQLite database. No cloud. Fast. Private. Yours.

🎯 Purpose

Track your daily, weekly, and monthly PD Arrays with custom levels (Price or Time), tags, sessions, and filters.
Useful for traders following Smart Money Concepts (SMC) or ICT methodology.

🚀 Features

🗁 PD Arrays

- ✚ Add new PD Arrays (with name, session, notes, tags, color, and timeframes)
- 📝 Edit or 🗑 Delete existing PD Arrays
- 🗎 View all PD Arrays (with tag filters and color preview)
- **Assign custom timeframes to each PD Array**

🧱 Levels

- ✚ Add levels (custom labels and types, bulk input supported)
- 📋 View all saved level entries (grouped by timestamp)
- 📑 Edit saved level entries (all values in one session)
- ⚒ Edit/🗑 Delete individual levels
- 💾 Save bulk values for each PD Array session
- 🖌 Filter entries by level type, label, date, price, and timeframe (fully combined)

🏷 Tags

- ⚒ Manage tag list (create/delete)
- 🖊 Add/remove tags on each PD Array
- 🏷 Filter PD Arrays by tag

📦 Tools

- 📤 Export PD Arrays or full data to CSV/JSON
- 📥 Import PD Arrays from CSV (optional)
- 📊 View statistics and recent activity
- 🔄 Backup and restore full database

📊 How it Works

- **Create PD Arrays** with session, timeframes, tags, and custom level structure
- **Add and edit levels** freely, including reusable types (e.g. FVG, CE, etc.)

- **Store level values** daily by entering all values for an array at once (with timestamp)
- **View entries** in grouped format (1 row per session) with full filtering (date, price, type, label, tag)
- **Export or import data** as needed for analysis or archiving
- **Everything runs locally** — fast, private, and offline-ready

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🛠 Tech Stack

- Python 3.10+
- Streamlit for UI
- SQLAlchemy for ORM
- SQLite for database (PostgreSQL possible)
- Modular codebase (all business logic in app/ folder)

🗂 Project Structure

```
ICT\_Notepad/
├── app.py                   # Streamlit entrypoint
├── main.py                  # (optional) CLI
├── requirements.txt
├── README.md
├── db/
│   └── trading\_guide.db
├── backups/
│   └── ... (optional, ignored by git)
├── app/
│   ├── **init**.py
│   ├── models.py            # SQLAlchemy models (PDArray, Level, LevelEntry, Tag)
│   ├── db\_utils.py          # DB helpers
│   ├── pd\_array.py          # PD Array logic
│   ├── level.py             # Level/LevelEntry logic
│   ├── tag.py               # Tags logic
│   ├── import\_utils.py      # CSV import logic
│   ├── export.py            # CSV/JSON export
│   ├── stats.py             # Statistics and activity logic
│   └── ...
│
```

🚀 Quick Start

> 🆕 Download latest release
> ☑ Requires **Python 3.10+** (tested with Python 3.11) and **pip**

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1. Clone the repository

```
git clone https://github.com/kopethan/ICT_Notepad.git
cd ICT_Notepad
```

2. (Recommended) Create a virtual environment

Linux / macOS:

```
python3 -m venv venv
source venv/bin/activate
```

Windows:

```
python -m venv venv
venv\Scripts\activate
```

> ☑ You should now see `(venv)` in your terminal

3. Install dependencies

```
pip install -r requirements.txt
```

4. Initialize the database (auto-created on first run)

```
python init_db.py
```

5. Run the app

```
streamlit run app.py
```

> 🗁 Make sure you're in the `/ICT_Notepad/` directory before running.

❓ Troubleshooting

If you see this error:

```
error: externally-managed-environment
```

That means your system is protecting its Python install. ☑ Use the virtual environment method shown above, or:

```
pip install -r requirements.txt --break-system-packages
```

🧩 Why is this different?

- All values are **logged historically**; nothing is overwritten
- Easy to retrieve, filter, and export years of trading levels
- **Local and private** by design (your data stays with you)
- Clean, intuitive UI, ready for extension

📝 License

`License` `MIT`

This project is licensed under the [MIT License](#).

👤 Author

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🤝 Contribute / Support

- Open an issue or PR to help improve ICT_Notepad!
- Suggestions and feedback are always welcome.

💝 Support This Project

If you enjoy using **ICT_Notepad** and want to support its development, feel free to:

- ☕ [Buy me a coffee](#)

Your support helps keep this project free, open-source, and continuously improved.