Request Summary

This project was undertaken at the request of an individual with an anti-government mindset and a healthy dose of justifiable paranoia. Their perspective does not reflect my own beliefs, anxieties, or current threat assessment level.

The core request was for a lightweight, local database to store and search survival-related documents. Modern, web-based solutions were explicitly off the table.

The intended use cases included, but were not limited to:

- Cataloging homesteading knowledge (gardening, farming, animal husbandry, carpentry, etc.)
- Storing basic survival skills (hunting, trapping, water purification, primitive shelter, etc.)
- Preparing for societal collapse, martial law, or other worst-case scenarios
- Navigating the end of civilization as we know it
- Exploring one's inner Kaczynski—should society truly go off the rails

While the initial spec was simply to store full plain text documents in a searchable heap, I expanded the scope immediately to make the tool usable in a real-world context (even one involving improvised snares and canned squirrel).

Key functionality added:

- Classification by author, category, and subcategory
- Keyword associations for improved search relevance
- File storage system for non-text documents, images, audio, video, or anything not suited to storage as plain text

Implementation Strategy – AKA: How I Built the Apocalypse-Proof Filing Cabinet

To keep the solution lightweight, portable, and fully local (because clouds are just someone else's computer), I developed the application in Python.

Given that flashy visuals were not a requirement—and may even be considered a liability in off-grid scenarios—I used Tkinter, Python's built-in GUI library. It delivers just enough interface to get the job done, without drawing too much attention or memory.

For the data layer, I selected SQLite for its simplicity, portability, and zero-config usage. It offered the ideal balance between structure and low overhead.

Why This Project

This application demonstrates my ability to transform loosely defined and unconventional requirements into a structured, functional, and user-friendly tool. It reflects my strengths in lightweight app development, practical UI design, and backend organization—plus a sense of humor when dealing with end-of-world scenarios.

Tech Stack

- Language: Python 3.12
- GUI: Tkinter
- Database: SQLite (FTS5 enabled)
- Deployment: Standalone, Windows-compatible
- Dependencies: None (uses standard library only)

Backend Design

A schema to store:

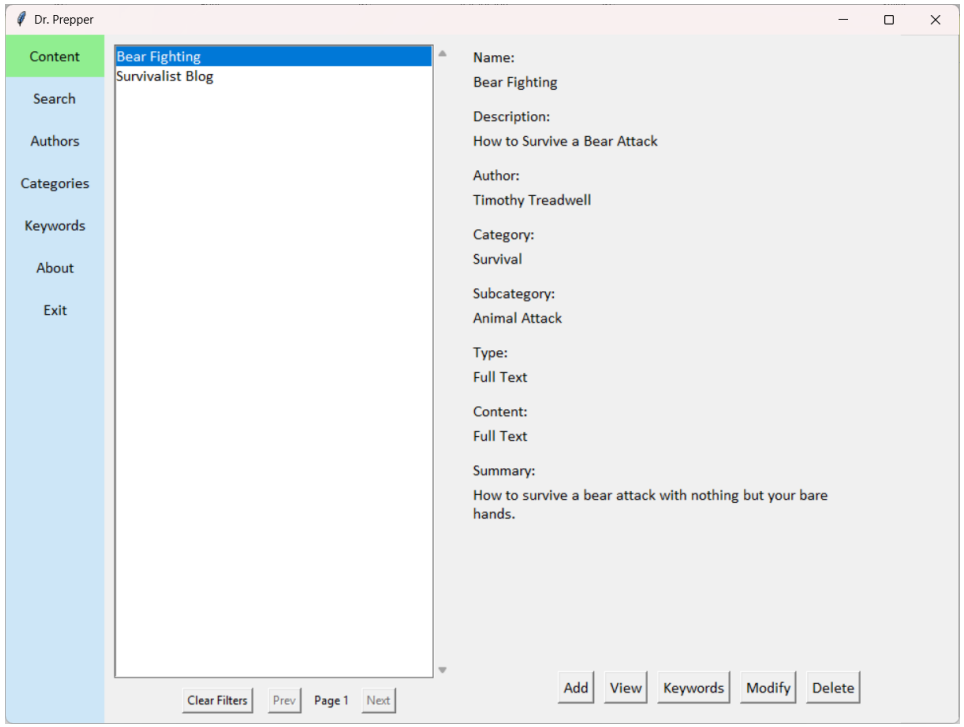
- Content
- Authors
- Categories and subcategories
- Keyword associations
- A full-text index on the primary content body to support the original request
- An additional full-text index on the 500-character summary field to improve discoverability for non-plain-text entries

Application Features

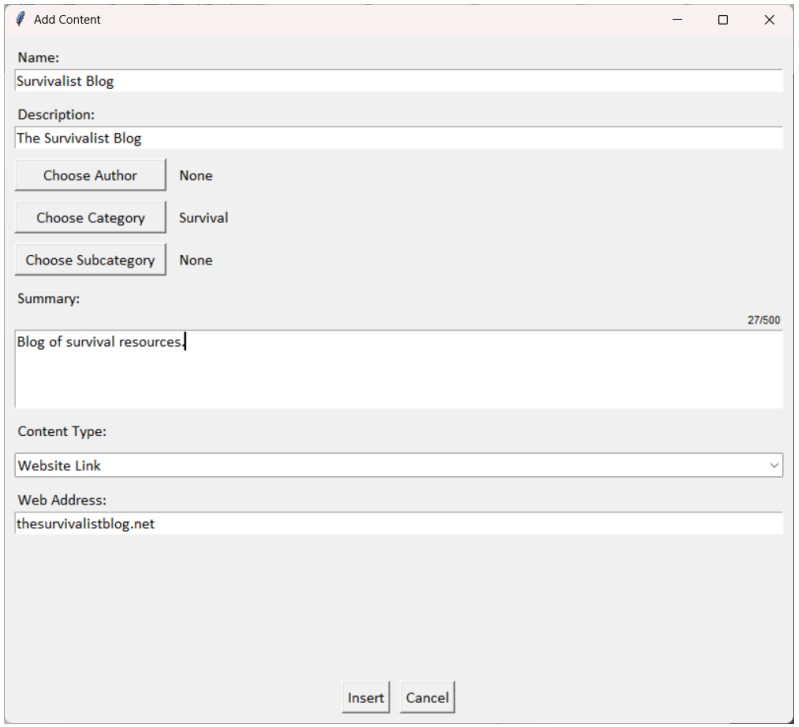
- Content Manager – Create, edit, and delete content entries, with support for:
  - Title, description, author, category, and subcategory
  - Summary (500-character max) for reference and indexed search
  - Content Types:
    - Full text: Original request—plain, searchable text
    - File-based: Store and retrieve arbitrary file types (PDFs, media, etc.) – Opens with the default associated application
    - Web address: Store a URL and summary – Opens in the default browser (admittedly not very usable post-apocalypse)
- Author Manager – Manage authors (in case it wasn't self-explanatory)
- Category Manager – Manage categories and their subcategories
- Keyword Manager – Manage keyword tags for enhanced search granularity
- Search Engine – Flexible querying capabilities, including:
  - Keyword
  - Author
  - Category / Subcategory
  - Summary (full-text indexed)
  - Full content (for entries of type "Full text" only – no deep search in external files)

INTERFACE

CONTENT MANAGER



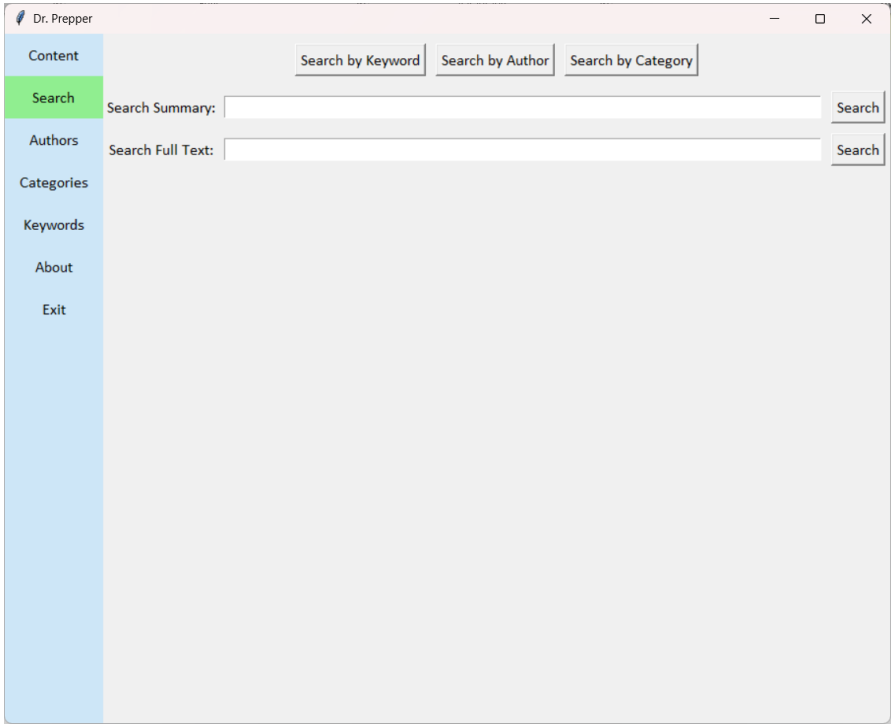
ADD NEW CONTENT



INTERFACE – CONTINUED

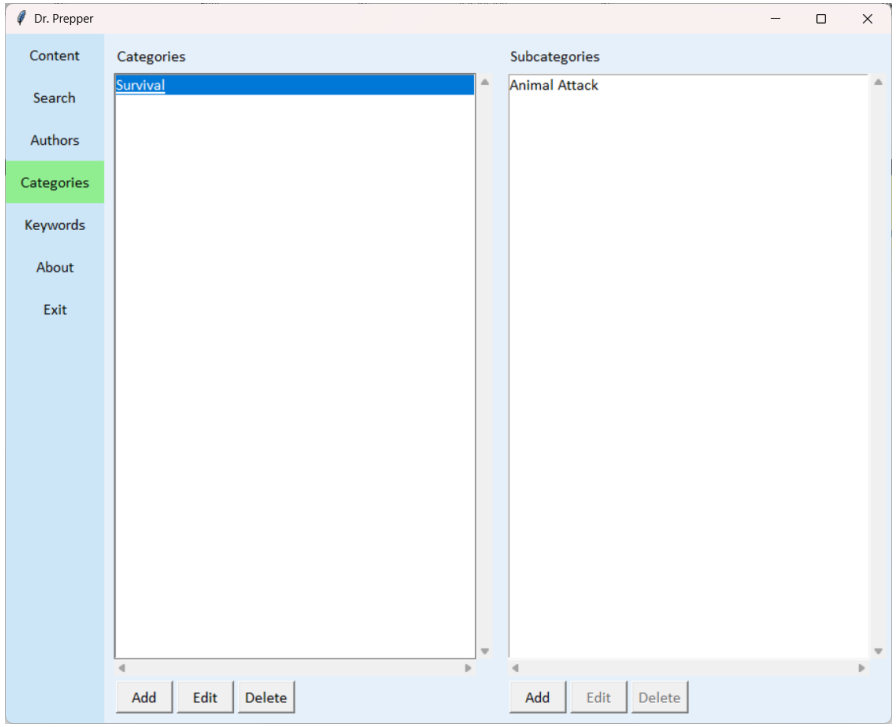
VIEW FULL TEXT CONTENT

SEARCH



INTERFACE – CONTINUED

CATEGORY MANAGER



ABOUT