Project Report: wikiHow Scraper GUI App

Objective

To build a Python-based GUI application that allows users to search for 'how-to' guides in real-time from wikiHow, display summarized content and steps, maintain a search history, and convert the program into a standalone Windows executable.

Technologies Used

- Python 3.11
- Tkinter (GUI)
- BeautifulSoup (Web scraping)
- Requests (HTTP requests)
- CSV (Data persistence)
- PyInstaller (EXE creation)

Features Implemented

- Search wikiHow in real-time using user input.
- Display summaries and steps clearly in a scrollable text box.
- Maintain search history with timestamps.
- Revisit or delete old searches with a single click.
- Packaged into a `.exe` file using PyInstaller.
- Runs offline, with results cached in a CSV for history.

GUI Interface

Built with Tkinter. Includes:
- Input field for query
- Search button
- Listbox showing search history
- Scrollable text area for results
- Button to delete selected history

Project Report: wikiHow Scraper GUI App

File Structure

project/

??? wikihow_scraper_gui.py

??? wikihow_search_history.csv

??? dist/

?   ??? wikihow_scraper_gui.exe

Installation Instructions

1. Install dependencies:

   pip install requests beautifulsoup4

2. Run the script:

   python wikihow_scraper_gui.py

3. Or generate `.exe`:

   pyinstaller --onefile --noconsole wikihow_scraper_gui.py

Testing

- Tested with various queries like:

   'How to make tea', 'How to code in Python'
- Verified history save and delete functionality
- `.exe` tested on Windows with successful execution

Conclusion

This project successfully demonstrates how to combine web scraping, GUI development, and data persistence to build a useful and user-friendly utility. It also showcases how to distribute Python apps in `.exe` form for broader usage.