Wandering Through the Stacks
A Means of Going Beyond Formal Course Requirements

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During my student days, a great deal of benefit was gained, and, in fact, still is, by wandering through a library's books. Such wandering enabled me to go beyond a course's formal requirements. For example, understanding multi-dimensional spaces was difficult for me. Then I ran across a book by a Russian mathematician that had been translated into English. His explanation and illustrations were so clear that I was able to grasp and apply the concept. This was important not only in mathematics but also in designing computer systems, especially the structure of data in memory.

BookSearch, the capability presented here, allows one to explore the "card catalog" of a large collection of open-access downloadable books. The search can be conducted without internet access. However, internet access is required to actually download a book. The idea is to make best use of internet access when that is available. This supports people who do not always have internet access, an important consideration in many parts of the world. If internet access is readily available, on online version of this application is available: http://informationanthology.net/Open-Access-Search.html.

In the zip file, BookSearch.zip, there is a directory, BookSearchExecutable. That directory has three files:

- BookSearch.pdf   This file.
- BookSearch.exe   The executable we will run on a Windows computer.
  (Tested on Windows 10 laptop and floortop.)
- data (directory)   Holds a database of books.
  (This database is in binary, not text, form. It is not directly readable.)

BookSearch.exe starts a local webserver and provides an interface for searching the database. The About tab shows the sources used. These sources were consolidated into the application presented here.

To start BookSearch running, double-left-click on BookSearch.exe from within File Explorer, as shown in Figure 1.
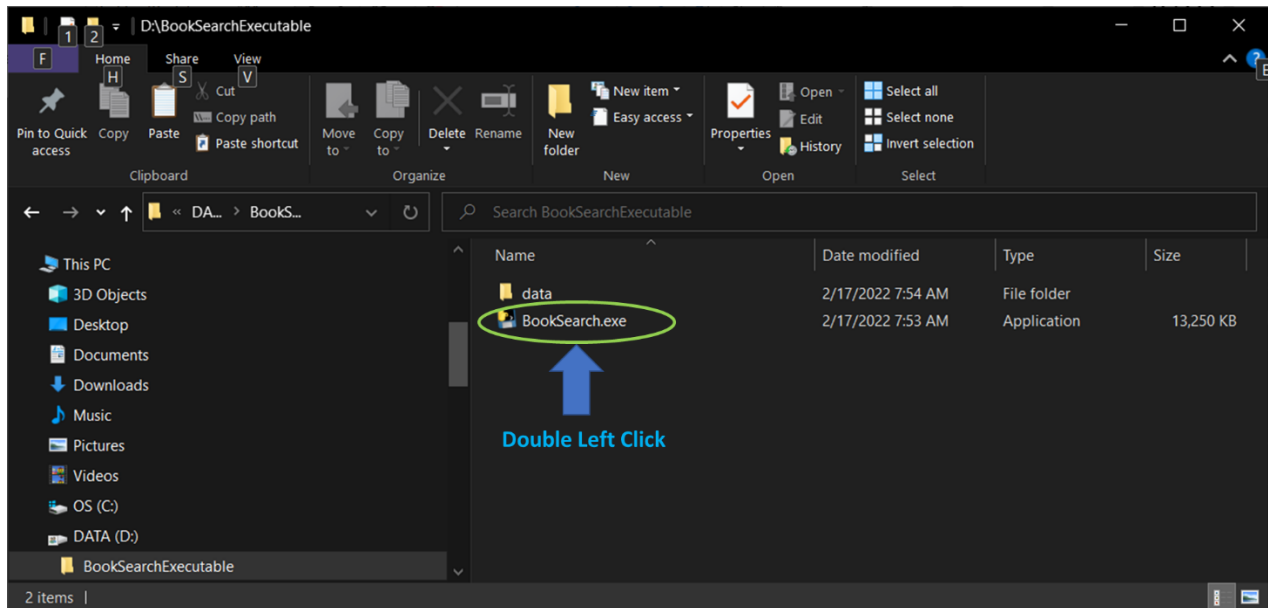

Figure 1. Double-left-click on BookSearch.exe to start the application.

When the application starts, you will see a console window, Figure 2. Notice at the bottom the address you should use in your browser. The console window is not necessary for using the application but it facilitates ending the application. Just enter ^C into the console.
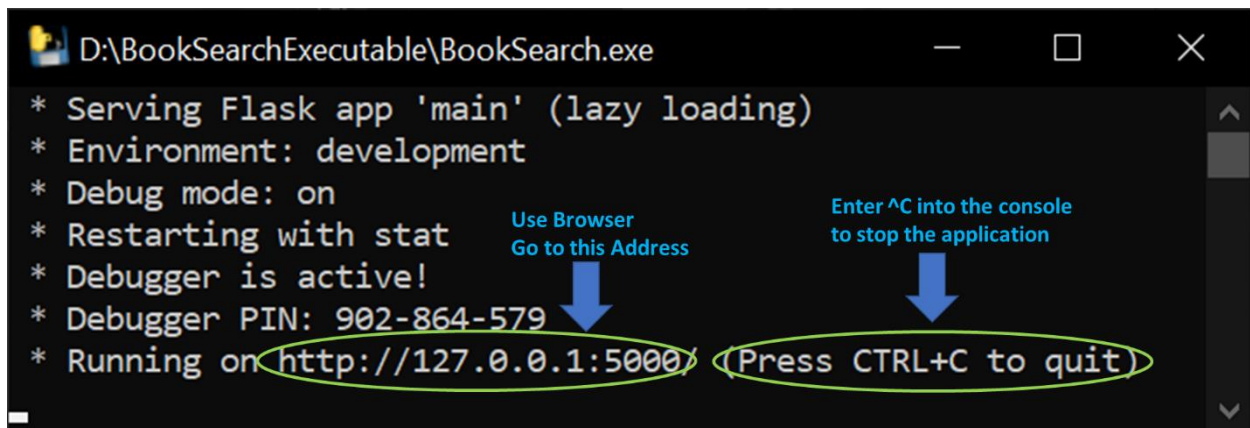

Figure 2. Use http://127.0.0.1:5000 in browser. ^C to quit.

After pointing your browser at http://127.0.0.1:5000, you can enter a single keyword or keyphrase and then left-click on the Search button to search book titles, Figure 3.
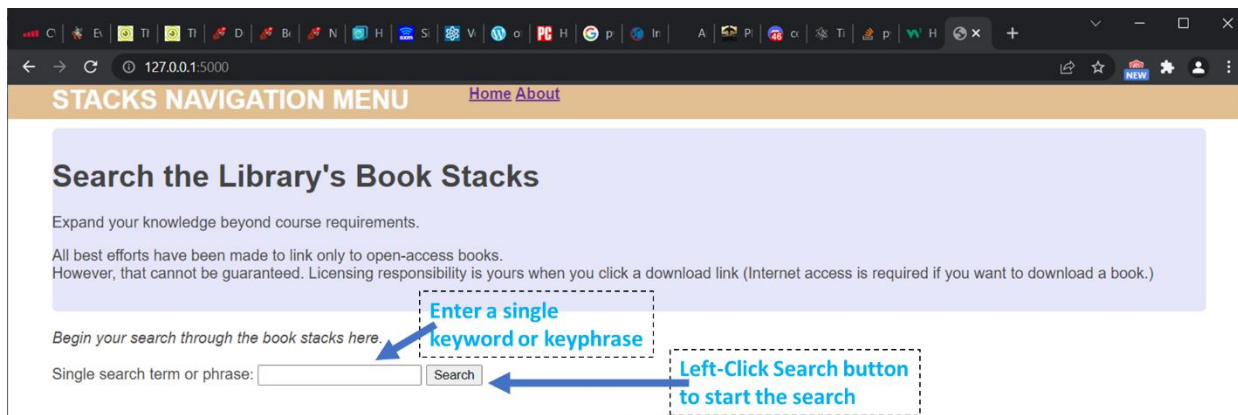

Figure 3. Enter single keyword or keyphrase. Press Search button to search titles.

Let's say we search on technical writing . We would get a list of books with that in their titles, Figure 4.
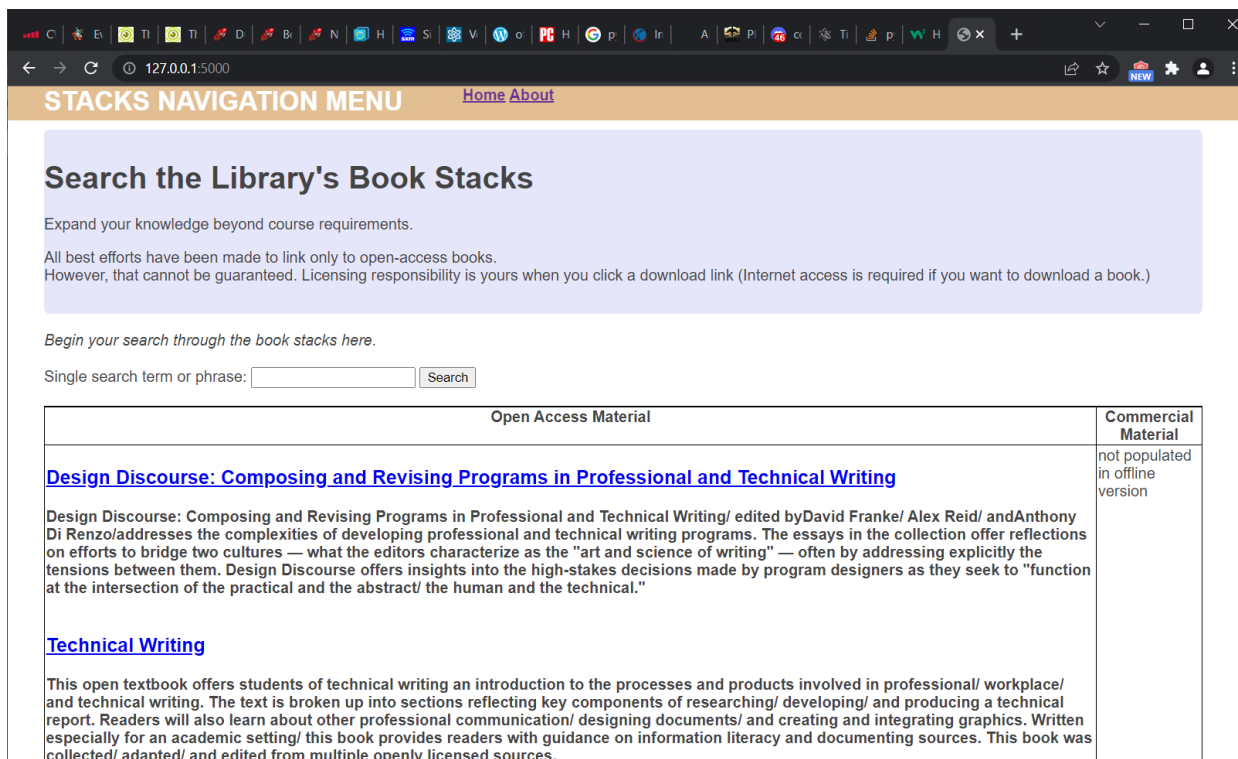

Figure 4. Partial result of searching on: technical writing.

Enter ^C into the console to end the application. I use this application to help find quality material while developing college courses for various organizations that provide learning opportunities. I hope you also gain good benefit.