

## Serendipity Booksellers Software Development Project— Part 14: A Problem-Solving Exercise

### 1. Add the `bookMatch` Member Function to the `BookData` Class

Currently the functions `lookUpBook`, `editBook`, and `deleteBook` search the book database for titles that match, or partially match, a search string. Add a member function named `bookMatch` to the `BookData` class. The function should accept a string as its argument and return `true` if the string is found in the book title. If the string is not found in the book title, `bookMatch` should return `false`.

### 2. Modify `lookUpBook`, `editBook`, and `DeleteBook`

Currently the `lookUpBook`, `editBook`, and `deleteBook` functions have their own method of comparing book titles with search strings. Modify them so they use the `bookMatch` function you added to the `BookData` class in Step 1.

### 3. Modify the Report Module

The reporting capabilities you added in Chapter 9 must now be modified to work with the `BookData` class.

### 4. Add Other Classes to the Program

Analyze the program for other ways to implement classes. Here are some suggestions:

- Consider whether the various menus could be managed by class objects. Could a class be constructed to hand the program's user interface?
- Analyze the file I/O performed by the program. Could a class be constructed to handle all the file operations?
- Determine if input validation could be performed by a class object.