Library DAO Tutorial

Step 3: JdbcTemplate Version – Creating the DAO Interface

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Step 3: JdbcTemplate Version - Creating the DAO Interface

Overview

In this step, we will create the Library DAO. This version (like the Model objects) will be more database-oriented rather than purely object-oriented. You will notice this in methods such as **deleteAuthor**, which takes an author id rather than an Author object.

Other indications that this DAO is more database-oriented appear in methods such as **getAuthorsByBookId** and **getPublisherByBookId.**   When we get to the Hibernate implementation of the DAO, you will see that methods such as these are not needed because the Book object will have a list of its Authors and a reference to its Publisher.

Library DAO

```java
package com.swcguild.library.dao;

import com.swcguild.library.model.Author;
import com.swcguild.library.model.Book;
import com.swcguild.library.model.Publisher;
import java.util.List;

public interface LibraryDao {

    public void addAuthor(Author author);
    public void deleteAuthor(int authorId);
    public void updateAuthor(Author author);
    public Author getAuthorById(int id);
    public List<Author> getAuthorsByBookId(int bookId);
    public List<Author> getAllAuthors();

    public void addBook(Book book);
    public void deleteBook(int bookId);
    public void updateBook(Book book);
    public Book getBookById(int id);
    public List<Book> getBooksByAuthorId(int authorId);
    public List<Book> getBooksByPublisherId(int publisherId);
    public List<Book> getAllBooks();

    public void addPublisher(Publisher publisher);
    public void deletePublisher(int publisherId);
    public void updatePublisher(Publisher publisher);
    public Publisher getPublisherById(int id);
    public Publisher getPublisherByBookId(int bookId);
    public List<Publisher> getAllPublishers();
}
```

Wrap-up

In this step, we did the following:

1. Designed the DAO interface.
2. Noted how this interface was database-oriented.
3. Looked at a couple of ways that the DAO will change when we create Hibernate version (which is more object-oriented than database-oriented).

In the next step, we will create the database.