

JDBC Lab Book

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Getting Started

Overview

This lab book is a guided tour for learning JDBC. It comprises solved examples and 'To Do' assignments. Follow the steps provided in the solved examples and work out the 'To Do' assignments given.

Setup Checklist

Here is what is expected on your machine in order for the lab to work.

Minimum System Requirements

- Intel Pentium 90 or higher (P166 recommended)
- Microsoft Windows 95, 98, or NT 4.0, 2k, XP.
- Memory: 32MB of RAM (64MB or more recommended)
- Connectivity to Oracle database

Please ensure that the following is done:

- Eclipse is installed.
- JDK 1.8 is installed.

Instructions

- For all Naming conventions, refer Appendix A. All lab assignments should adhere to naming conventions.
- Create a directory by your name in drive <drive>. In this directory, create a subdirectory jpa_assgn. For each lab exercise create a directory as lab <lab number>.

Learning More

- <http://docs.oracle.com/javaee/7/api/javax/persistence>
- <http://www.objectdb.com/java/jpa/>

Lab 1.JDBC Application

Goals	1. JDBC CRUD application using Eclipse IDE
Time	120 minutes

1.1 : Extend the assignment of Core Java 8 Collections Case study lab by persisting data into database instead of hashmap and display/delete data from database.

1.2

<<To-do Assignments>>

Assignment: Consider the Author class given below. Create a JDBC application to perform CRUD operations (i.e. insert, update, delete) on author entity. Also display the author details based on provided author id. Create required table in database before running application.

Author
authorId
firstName
middleName
lastName
phoneNo

1.3 Consider the entity relationship diagram as shown below. Identify the correct association between the book and author and implement the same using JDBC. Create necessary entity classes and tables as required and perform below operations on this:

- 1.3.1 Select the list of all book titles which are written by specific Author
- 1.3.2 Accept book and author details from user and insert into database. Generate author id and ISBN using sequence.
- 1.3.3 Update the price of books for which author name is entered by user.

