Organised by,

SKILL LYNC

A Internship Project Report

On

BOOK-SHOP

Submitted by,

Vishal Borase

Vishalborase143@gmail.com

https://github.com/VishalBorase1

INTRODUCTION

• This is my portfolio project which demonstrates with my abilities in building a completely based on JDBC i.e Java Database Connectivity. i Created Database Connection between Java Eclipse Code and Mysql . Create a Database i.e the Namely as “Book-Shop” In. these Database User stores Many No of Books information i.e Book name its Edition and its Price He Display all of that Data with List. And Also Make Many Operations On it He can Save Book Data , Update the Book Data , Delete the Book Data and Clear the Book Data .

JDBC

A. What is JDBC ?

JDBC stands for Java Database Connectivity. JDBC is a Java API to connect and execute the query with the database. It is a part of JavaSE (Java Standard Edition). JDBC API uses JDBC drivers to connect with the database. We can use JDBC API to access tabular data stored in any relational database. By the help of JDBC API, we can save, update, delete and fetch data from the database. What is API ? API (Application programming interface) is a programs document that contains a description of all the features of a product or software. It represents classes and interfaces that software can follow to communicate with each other. An API can be created for applications, libraries, operating systems, etc.

B. Types of JDBC Driver

There are 4 types of Driver Softwares:

1. Type1 Driver : JDBC-ODBC Bridge

2. Type2 Driver : Native API Driver

3. Type3 Driver : Network Protocol Driver

4. Type4 Driver : Pure Java Driver/ Thin Driver

When we are interacting with the database we must following the following steps:

1. load the driver

    mysql 8.O → Class.forName("com.mysql.cj.jdbc.Driver");//adding the jar

2. establish connection

    DriverManager.getConnection(url,user,pwd);

    url = jdbc:mysql://localhost:3306/bookshop?autoReconnect=true&useSSL=false

    jdbc→ API

    mysql → database

    localhost→ Network

    3306 → Port for mysql

    jdbc_training → database name

    name = root

    pwd = root

3. prepare the query

4. run the query and get the results

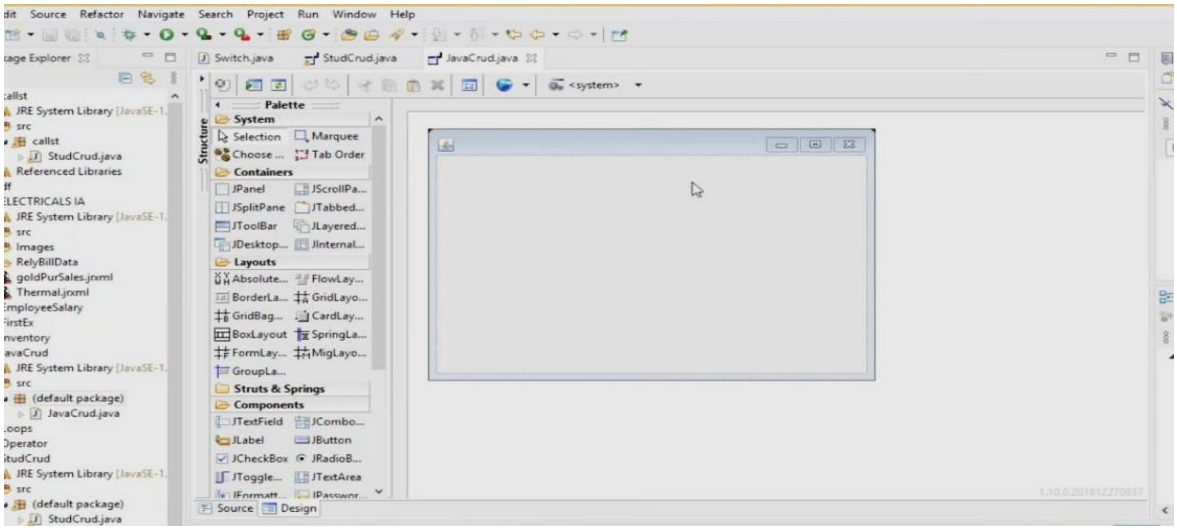
5. close all the open connections

Required Software Tools :

- **Java Eclipse IDE**
- **Mysql**
- **Windows Builder**
- **Mysql Connector jar**
- **rs2xml.jar**
- **Xampp**

Steps For Create the Project :

- Firstly, Create New Java Project File and Give name as JavaCrud then Creat class name JavaCrud.java
- Download Windows builder Using Eclipse Marketplace and then Going to Design Application Windows For Our project file that is steps , Firstly Right Click on project → New → Others → Windows Builder → Swing Designer → Application Window . This Application Window Shows below pic then

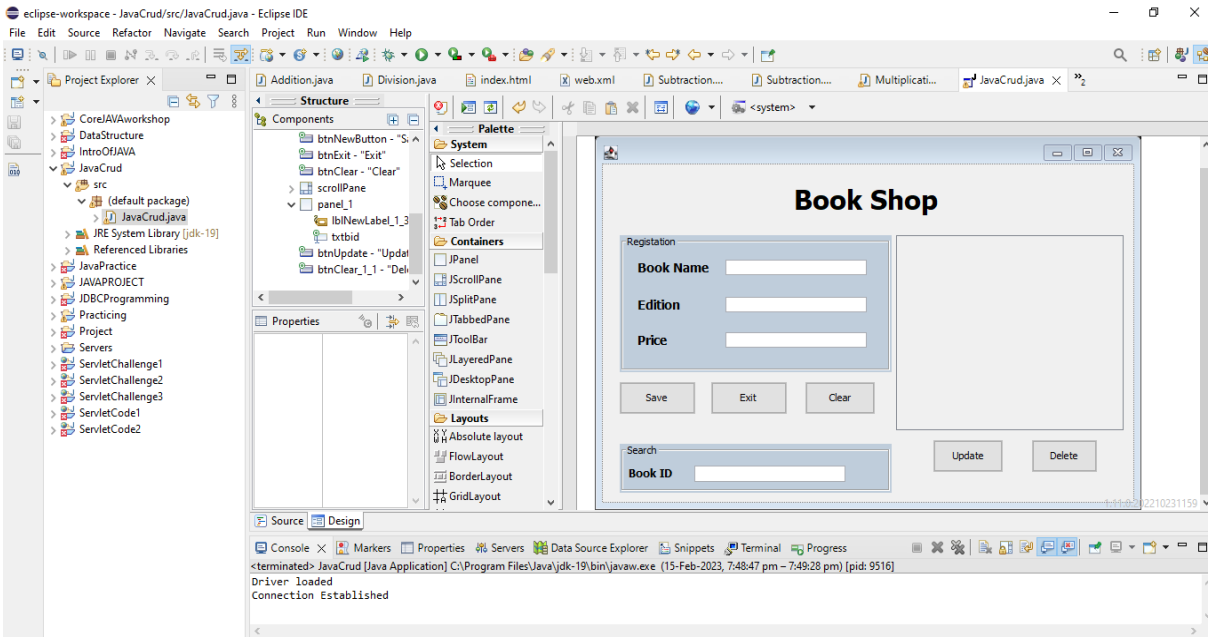


Design Application Window :-

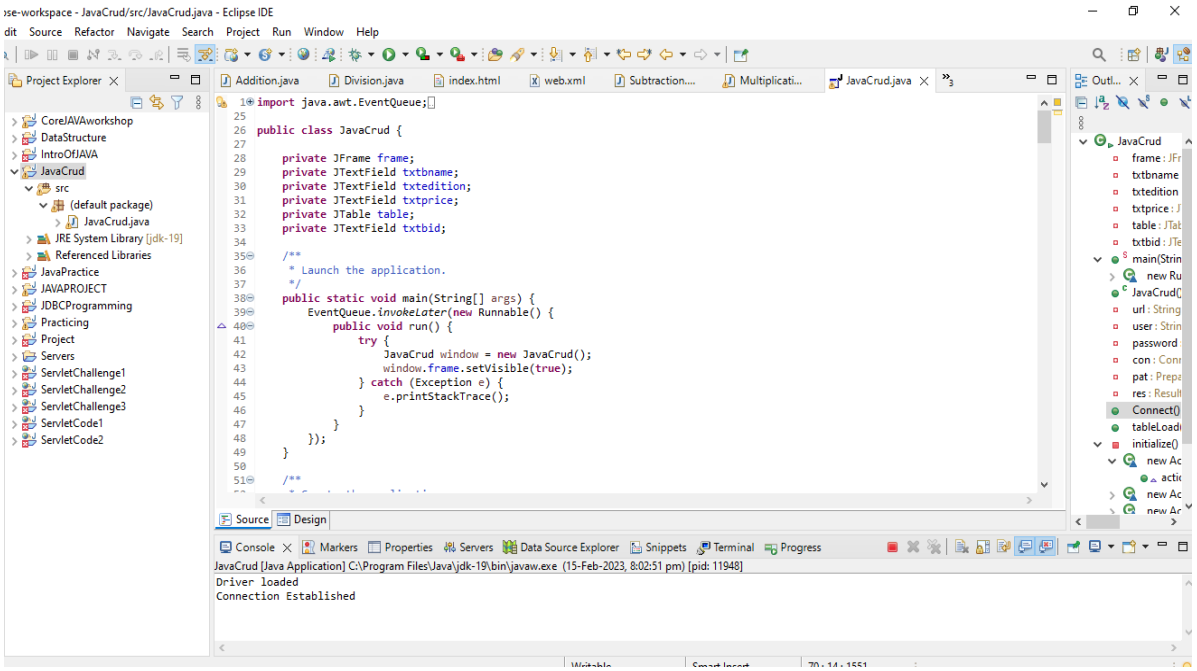
- From the Using Palette i.e Left Side Palette from application window There are many tools We want to used in our project Design that are Section wise i.e System, Containers, Layouts, Struct & Springs , Components etc.
- From The Palette Firstly Going to Components , Select and Drag JLabel as New Label for our Application window and Going to properties Change the Name Or Rename as a “Book Shop” and Using Properties also change Font and Bold it.
- Then , We Need to Design Registeration Panel For that Select and Drag JPanel from Containers Going to properties of the panel then select border then Select TitledBorder Give Title as Registeration. In Registeration Panel Using Jlabel Create Three Labels Rename it as Book Name , Edition , Price then Drag JTextField For all of these in front of each labels and Design Registeration Panel. And Also Rename JTextField name as txtbname , txtedition and txtprice .

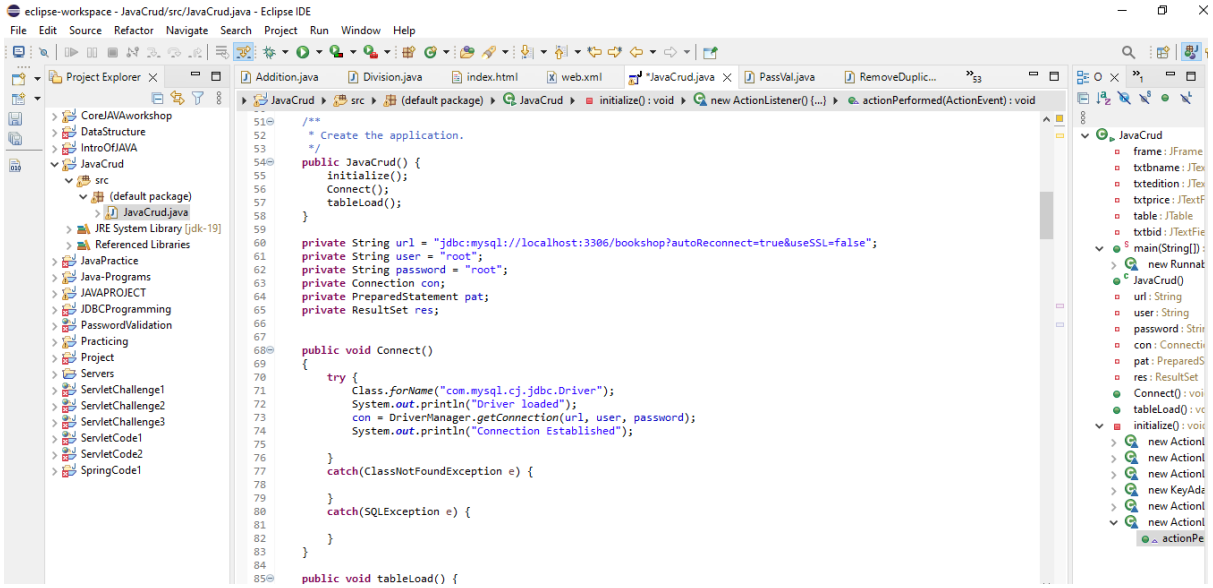
- After that We need to Create Buttons Save , Exit , Clear is in below the Registeration Panel For that Select and Drag JButton From Components Rename it From Properties as Save , Exit and Clear
- Design Search Panel Select and Drag JPanel from Containers Going to properties of the panel then select border then Select TitledBorder Give Title as Search.
- After that Select and Design Scroll Pane in Application Windows i.e Right Side of Registeration Panel Go to pallete Select and DragJScrollPane From Containers.
- Finally Design Update and Delete Buttons Select and Drag JButton From Components Rename it From Properties as Update and Delete .

Application Window



JDBC Java Crud Source Code

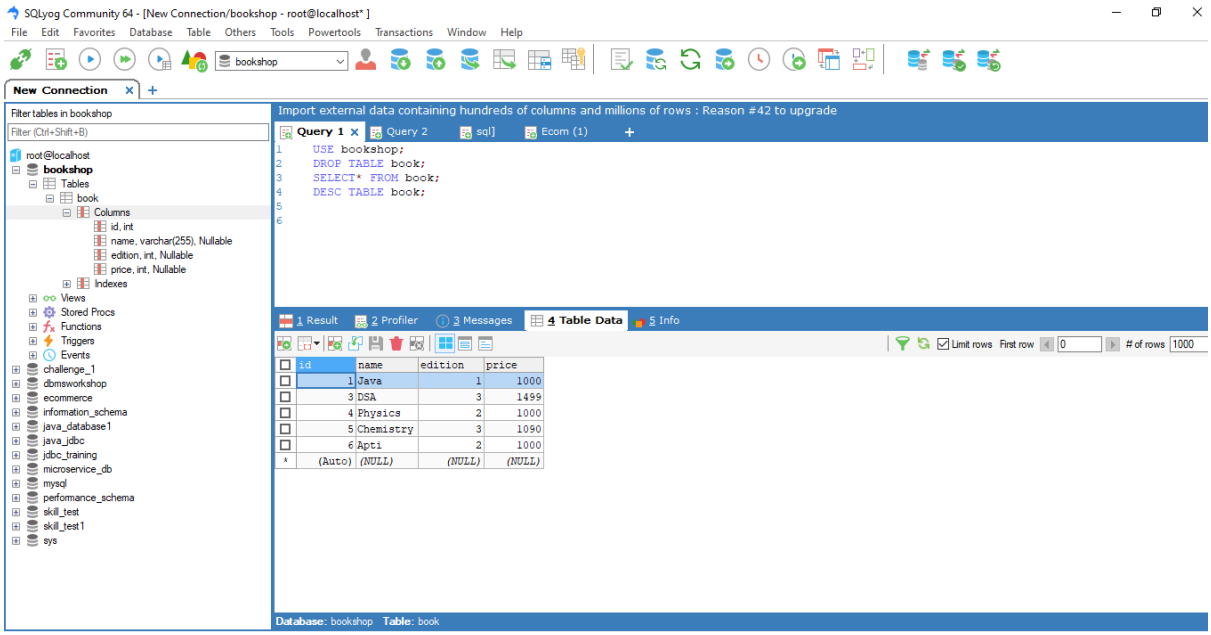




MySQL Connectors :

MySQL provides standards-based drivers for JDBC, ODBC, and .Net enabling developers to build database applications in their language of choice. In addition, a native C library allows developers to embed MySQL directly into their applications.

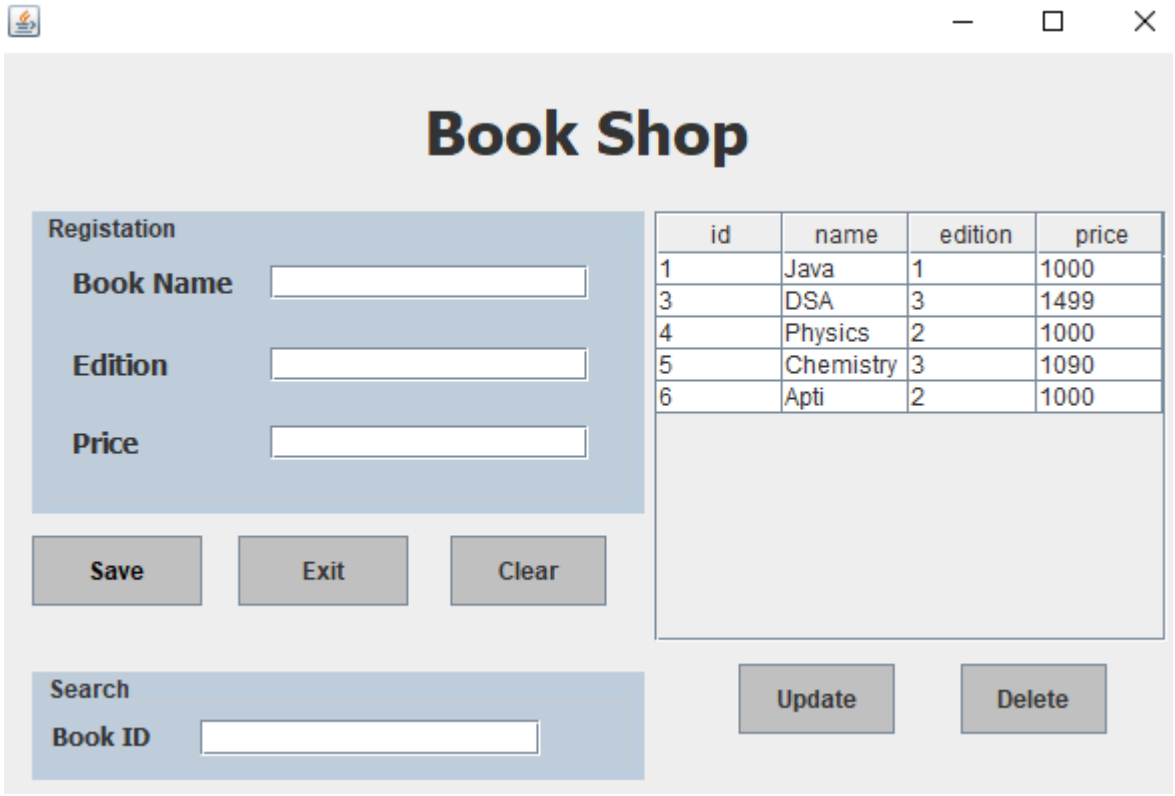
Mysql Window



Mysql Data Table

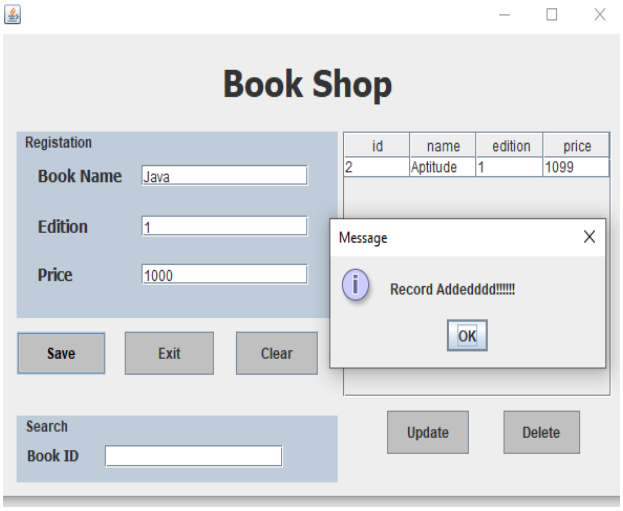
id	name	edition	price
1	Java	1	1000
3	DSA	3	1499
4	Physics	2	1000
5	Chemistry	3	1090
6	Apti	2	1000
(Auto)	*(NULL)*	*(NULL)*	*(NULL)*

Output Window of Java Crud

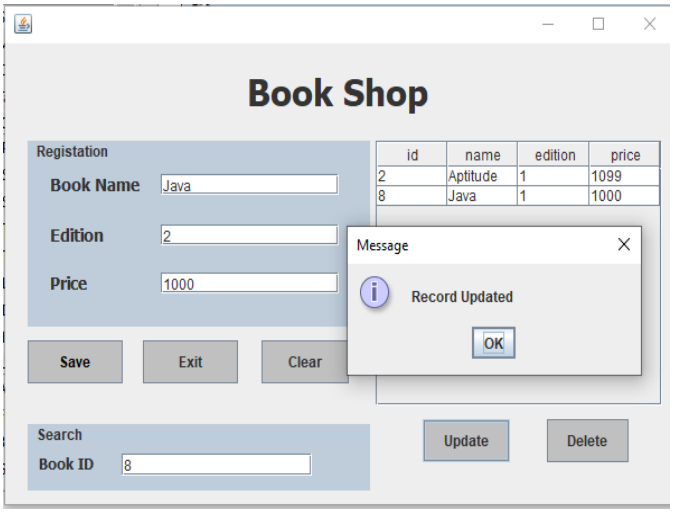


JDBC Crud Operations :

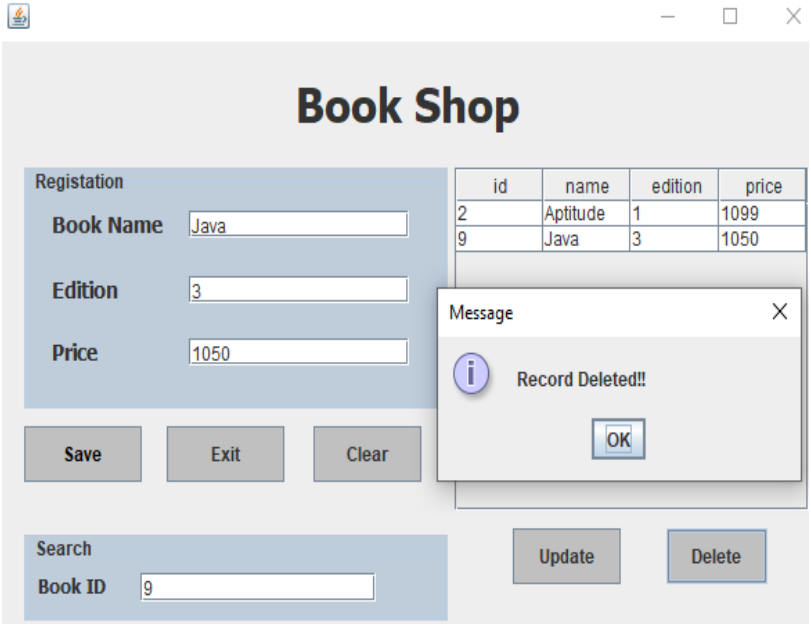
Record Added



Record Updated



Record Delete



1. Add Records

you can use the following code snippet to add the records in to database. paste the code inside the add button

2. View Records

you can use the following code snippet to retrieve the data stored in the database and present it to users in a proper format. create a method **table_load() .**paste the method inside the constructor of the class.when the form is loaded all the records will be shown on the jTable.

3. Search Records

Enter the book id on textfield relavent book information will be displayed on the relavent textfield. textfield event select as keyReleased event

4. Edit

you can use the following code snippet to Edit the records.

5. Delete

you can use the following code snippet to Delete the records.

Result

In this project I learnt about crud operations using Window Builder GUI for user interaction and it was easy to develop code There are Many tools From the Using Windows builder which helps create project and that is automatically generates the partial code.