SKILL⚭LYNC

Internship Project On

BOOK SHOP

Presented By,

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ABSTRACT

This is my portfolio project which demonstrates my abilities in building a JDBC (Java Database Connectivity) using MySQL and Java Eclipse IDE, Here I have developed the code for Java Crud operation where user can process books information like Book name, Edition, Price and Quantity by displaying the data on a Window builder GUI.

SOFTWARE TOOLS

- Java Eclipse IDE

- MySQL Database

- Windows Builder GUI

- MySQL Connector jar

- rs2xml.jar

HARDWARE USED

- RAM 16 GB

- Processor 64-bit

- Hard drive space required 2GB for installation

JDBC(Java Database Connectivity)

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 document that contains a description of all the features of a product or software. It represents classes and interfaces that software programs can follow to communicate with each other. An API can be created for applications, libraries, operating systems, etc.

There are 4 types of Driver Software's:
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

STEPS FOR CREATE THE PROJECT :

- Create New Java Project File and Give name as Bookshop then Create class name BookShop.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 Resize it.
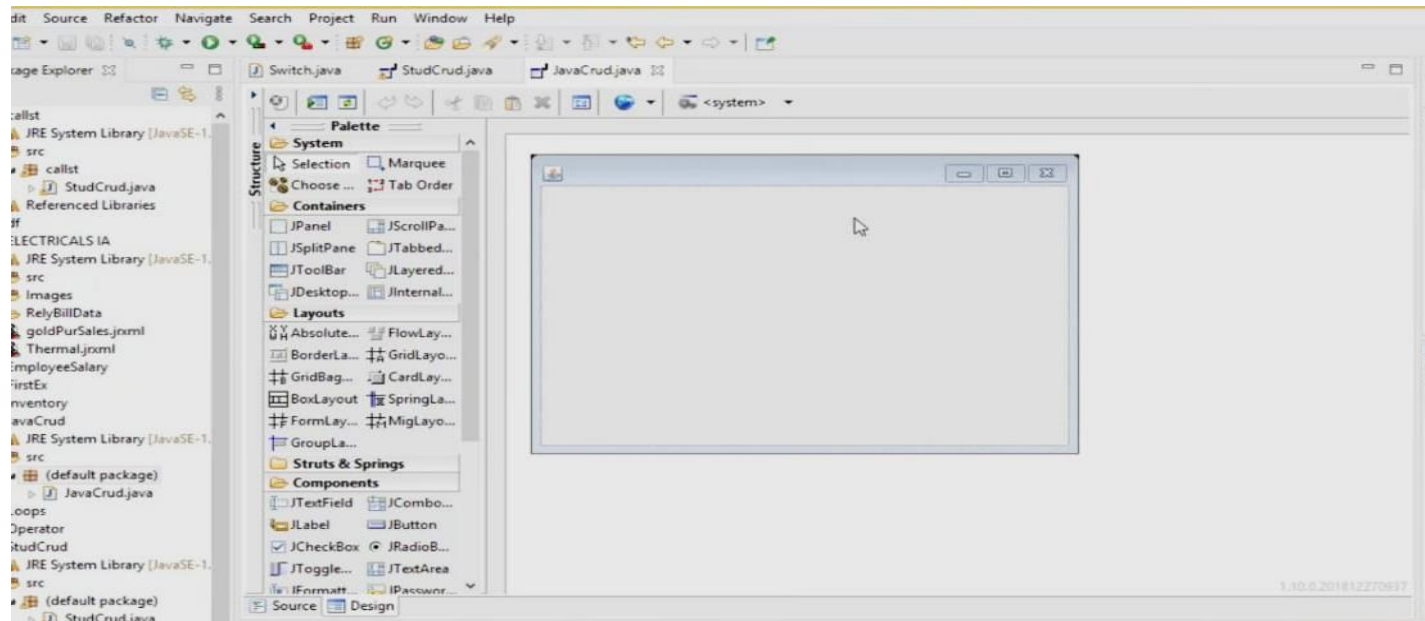
- Design Application Window :-

➢ 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 Registration Panel For that Select and Drag JPanel from Containers Going to properties of the panel then select border then Select Titled Border Give Title as Registration. In Registration Panel Using Label Create Three Labels Rename it as Book Name , Edition , Price then Drag Eastfield For all of these in front of each labels and Design Registration 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 WINDOWS DESIGN

J-Label

Please login Shopkeeper

User Name

Password

Login

When we Add insert these J-text fields, J-Panels and J-buttons in J-frames Codes will be automatically generated.

Book Shop

Logout

Registration

Book Name

Edition

Price

Qty

id	bookName	edition	price	qty

Save

Exit

Clear

Serach

Book ID

Update

Delete
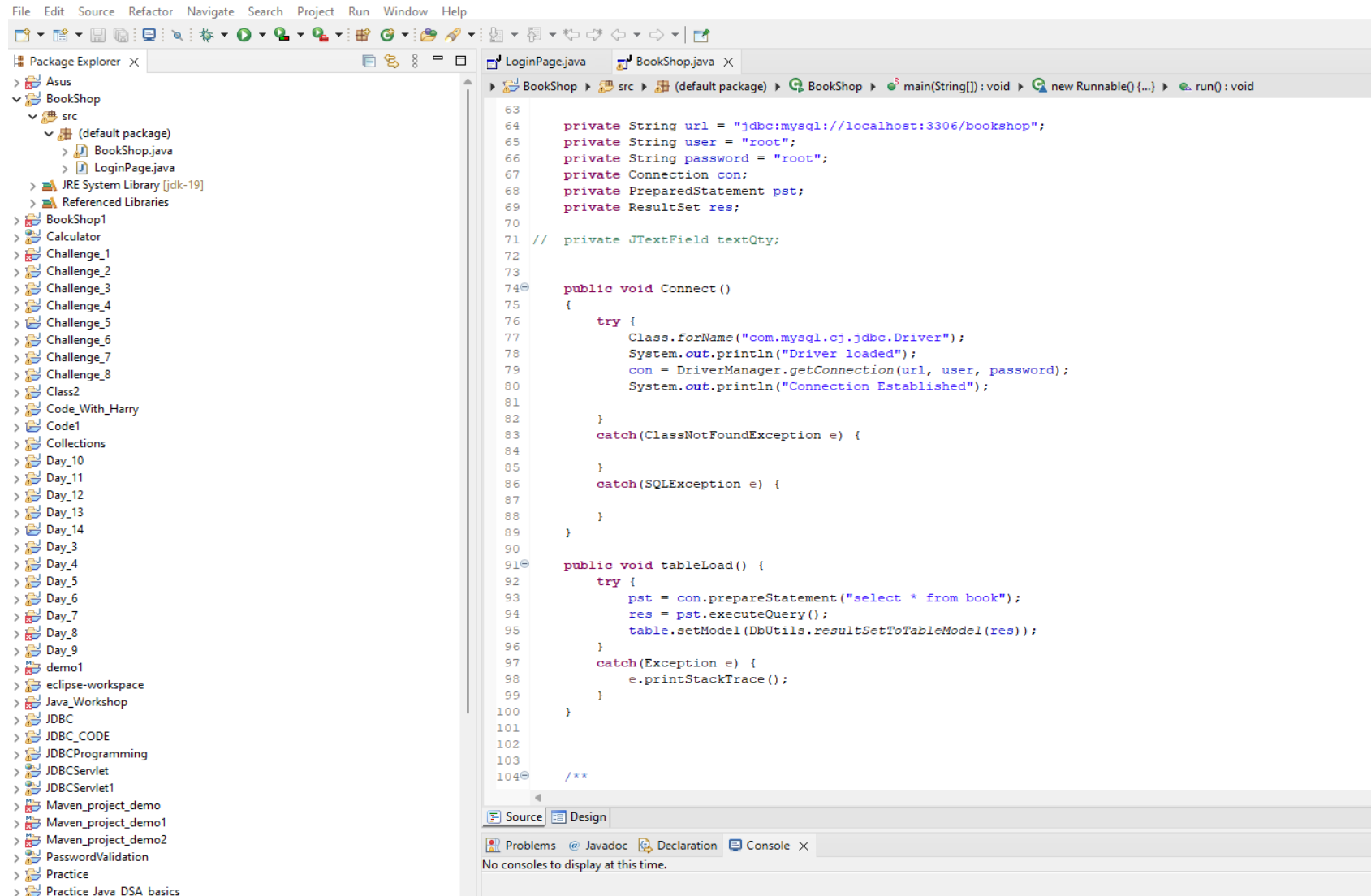
J-text field

J-Button

J-Panel

JDBC SOURCE CODE

SQLYOG WINDOW

bookshop

New Connection ✕ +

Filter tables in bookshop

Filter (Ctrl+Shift+B)

- root@localhost
- **bookshop**
- challenge_1
- e_commerce
- employee_details
- information_schema
- jdbc_test
- jdbc_training
- microservicesdb
- mysql
- performance_schema
- school
- student
- sys

No nag screens on startup and shutdown : Reason #1 to upgrade

Query 1   +

```
1    CREATE DATABASE school;
2
3    USE bookshop;
4
5    `book`
6    SELECT * FROM employee WHERE empid = 102;
7
8    SELECT * FROM book;
9
10   CREATE TABLE shopowner (username VARCHAR(255), pwd VARCHAR(50));
11
12   INSERT INTO shopowner VALUES('Sharath P','lbi16ME@4292023');
13
14   SELECT * FROM shopowner;
15
16   DELETE FROM book WHERE id = 8;
17
18   ALTER TABLE book DROP qty ;
19
20   ALTER TABLE book ADD qty INT ;
21
22   DESCRIBE book;
23
```
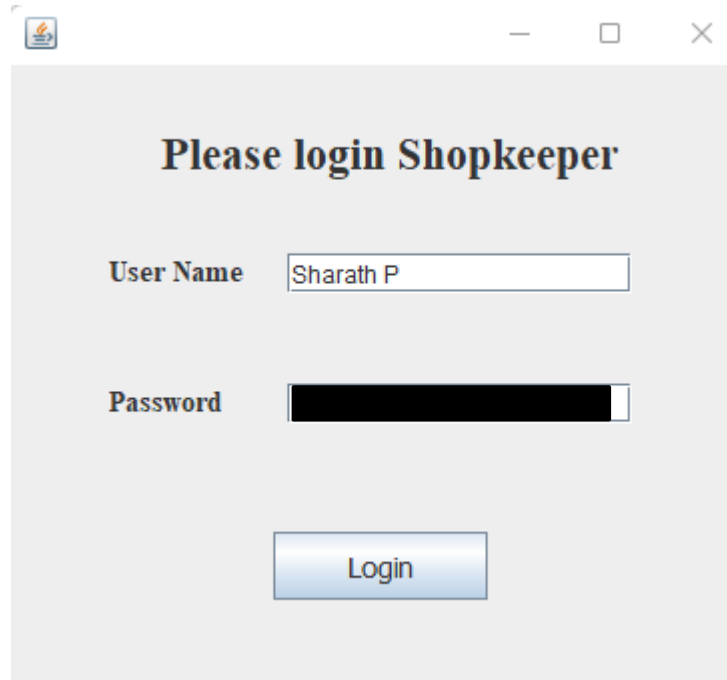
1 Result   2 Profiler   3 Messages   4 Table Data   5 Info

(Read Only)

id	bookName	edition	price	qty
1	Java	1	1000	10
2	Ramayana	5	2000	15
3	Raman	5	2000	5
4	Shivam	5	6000	(NULL)
5	python	3	500	(NULL)
6	Code with Ninja	6	5000	(NULL)
10	Rahna	2	258	(NULL)
11	Kavyamimamse	8	2000	(NULL)

OUTPUT WINDOWS

Login Page

Here also JDBC crud
Operation is performed
To validate the password
Existing in the database.

Data processing Page

JDBC crud Operation is Performed which are as Follows in further slides

JDBC OPERATIONS

Record Added

Record Updated

JDBC OPERATIONS

Record Deleted

SQL Database

id	bookName	edition	price	qty
1	Java	1	1000	10
2	Ramayana	5	2000	15
3	Raman	5	2000	5
4	Shivam	5	6000	(NULL)
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10	Rahna	2	258	(NULL)
11	Kavyamimamse	8	2000	14

CONCLUSION

In this project I learnt Window Builder GUI usage for user interaction and it was easy to develop code since J frame tools automatically generates the partial code. Now I am familiar with the java crud operation performing through the window builder GUI.

Thank you ……..