Spring & Hibernate

Property	Type
CarlD	Int
CarModel	String
CarType	String
Rate_per_km	Int
Seat_Capacity	String

Database:

Column Name	Datatype	PK	NN	UQ	В	UN	ZF	ΑI	G	Default/Expression
? CarID	INT	~	~							
○ CarModel	VARCHAR(255)									NULL
	VARCHAR(255)									NULL
Rate_per_km	INT		~							
Seat_Capacity	VARCHAR(255)									NULL

Source Code:

Bean:

package com.car.bean;

import javax.persistence.Entity;

import javax.persistence.ld;

import javax.persistence.Table;

@Entity

@Table(name = "car_tbl2")

```
public class Car {
@ld
private int CarID;
private String CarModel;
private String CarType;
private int Rate_per_km;
private String Seat_Capacity;
public Car() {
super();
}
public Car(int carID, String carModel, String carType, int rate_per_km, String
seat_Capacity) {
super();
CarID = carID;
CarModel = carModel;
CarType = carType;
Rate_per_km = rate_per_km;
Seat_Capacity = seat_Capacity;
}
public int getCarID() {
return CarID;
}
```

```
public void setCarID(int carID) {
CarID = carID;
}
public String getCarModel() {
return CarModel;
}
public void setCarModel(String carModel) {
CarModel = carModel;
}
public String getCarType() {
return CarType;
}
public void setCarType(String carType) {
CarType = carType;
}
public int getRate_per_km() {
return Rate_per_km;
}
public void setRate_per_km(int rate_per_km) {
Rate_per_km = rate_per_km;
```

```
}
public String getSeat_Capacity() {
return Seat_Capacity;
}
public void setSeat_Capacity(String seat_Capacity) {
Seat_Capacity = seat_Capacity;
}
@Override
public String toString() {
return "Car [CarID=" + CarID + ", CarModel=" + CarModel + ", CarType=" + CarType + ",
Rate_per_km="
+ Rate_per_km + ", Seat_Capacity=" + Seat_Capacity + "]";
}
}
```

Controller:

```
import java.util.List;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Controller;
import org.springframework.web.bind.annotation.ModelAttribute;
import org.springframework.web.bind.annotation.RequestMapping;
```

```
import org.springframework.web.servlet.ModelAndView;
import com.car.DAO.carDao;
import com.car.bean.Car;
import com.spring.bean.Student;
@Controller
public class CarController {
@Autowired
carDao dao;
@RequestMapping("banner")
public ModelAndView loadbanner() {
ModelAndView mv = new ModelAndView("banner");
return mv;
}
@RequestMapping("Link1")
public ModelAndView loadLinks() {
ModelAndView mv = new ModelAndView("Link1");
return mv;
}
@RequestMapping("insert")
public ModelAndView loadInsertStudent() {
ModelAndView mv = new ModelAndView("insert");
System.out.println("button");
return mv;
}
@RequestMapping("Insertion")
public ModelAndView doInsert(@ModelAttribute("bean") Car bean) {
System.out.println("hi");
dao.insert(bean);
```

```
ModelAndView mv = new ModelAndView("insertsuccess");
mv.addObject("bean", bean);
return mv;
}
@RequestMapping("delete")
public ModelAndView loadDeleteStudent()
List<Integer> list = dao.idList();
ModelAndView mv = new ModelAndView("delete");
mv.addObject("idlist",list);
return mv;
}
@RequestMapping("Deletion")
public ModelAndView doDelete(@ModelAttribute("bean")Car bean)
List<Integer> list = dao.idList();
dao.delete(bean);
ModelAndView mv = new ModelAndView("deletesuccess");
mv.addObject("idlist",list);
//mv.addObject("bean",bean);
return mv;
}
@RequestMapping("update")
public ModelAndView loadUpdateStudent()
List<Integer> list = dao.idList();
ModelAndView mv = new ModelAndView("update");
mv.addObject("idlist",list);
return mv;
}
@RequestMapping("fetch")
public ModelAndView loadFetch(@ModelAttribute("bean")Car c1){
int id = c1.getCarID();
Car c2 = dao.fetchMethod(id);
System.out.println(c2);
```

```
ModelAndView mv = new ModelAndView("update");
mv.addObject("c",c2);
System.out.println();
return mv;
@RequestMapping("Updation")
public ModelAndView doUpdate(@ModelAttribute("bean")Car bean)
{
dao.update(bean);
List<Integer> list = dao.idList();
ModelAndView mv = new ModelAndView("updatesuccess");
//mv.addObject("bean",bean);
mv.addObject("idlist",list);
return mv;
}
@RequestMapping("view")
public ModelAndView loadViewStudent()
List<Integer> list = dao.idList();
System.out.println(list);
ModelAndView mv = new ModelAndView("view");
mv.addObject("idlist",list);
return mv;
}
@RequestMapping("viewall")
public ModelAndView loadFindAll() {
List<<u>Student</u>> list = dao.findallStudent();
ModelAndView mv = new ModelAndView("viewall");
mv.addObject("list",list);
mv.addObject("msg","viewall");
return mv;
}
@RequestMapping("Edit")
public ModelAndView loadedit(@ModelAttribute("rdata")Car emp) {
String id = emp.getCarID();
List<Car> list = dao.findallStudent();
ModelAndView mv = new ModelAndView("viewall");
```

```
mv.addObject("list",list);
mv.addObject("id",id);
mv.addObject("msg","Edit");
return mv;
}
@RequestMapping("Save")
public ModelAndView doEdit(@ModelAttribute("data")Car emp) {
dao.updateStudent(emp);;
List<Car> list = dao.findallStudent();
ModelAndView mv = new ModelAndView("viewall");
mv.addObject("list", list);
mv.addObject("msg","viewall");
return mv;
@RequestMapping("Remove")
public ModelAndView doRemove(@ModelAttribute("rdata")Car emp) {
dao.delete(emp);;
List<Car> list = dao.findallStudent();
ModelAndView mv = new ModelAndView("viewall");
mv.addObject("list", list);
mv.addObject("msg","viewall");
return mv;
}
@RequestMapping("NewElem")
public ModelAndView loadNew() {
List<Car> list = dao.findallStudent();
ModelAndView mv = new ModelAndView("viewall");
mv.addObject("msg","New");
mv.addObject("list", list);
return mv;
}
@RequestMapping("New")
public ModelAndView doNew(@ModelAttribute("bean")Car emp) {
dao.insert(emp);
List<Car> list = dao.findallStudent();
ModelAndView mv = new ModelAndView("viewall");
mv.addObject("msg","viewall");
```

```
mv.addObject("list",list);
return mv;
}

Dao:
```

```
package com.car.DAO;
import java.util.List;
import org.hibernate.Session;
import org.hibernate.Transaction;
import org.hibernate.query.Query;
import com.car.Utill.HibernateUtil;
import com.car.bean.Car;
public class carDao {
public int insert(Car c) {
int n = 0;
try {
System.out.println(c);
Session session = HibernateUtil.opensession();
Transaction t = session.beginTransaction();
session.persist(c);
n = 1;
t.commit();
session.close();
} catch (Exception e) {
e.printStackTrace();
}
```

```
return n;
}
public List<Integer> idList()
{
Session session = HibernateUtil.opensession();
Transaction transaction = session.beginTransaction();
Query query = session.createQuery("select CarID from Car");
List<Integer> list = query.list();
transaction.commit();
session.close();
return list;
}
public void delete(Car bean)
Session session=HibernateUtil.opensession();
Transaction t = session.beginTransaction();
session.delete(bean);
t.commit();
session.close();
}
public Car fetchMethod(int id){
Session session = HibernateUtil.opensession();
Transaction \underline{t} = session.beginTransaction();
Car temp = session.find(Car.class, id);
return temp;
}
public void update(Car bean)
Session session=HibernateUtil.opensession();
Transaction t = session.beginTransaction();
session.update(bean);
t.commit();
```

```
session.close();
}
public Car viewStudent(Car bean)
{
Session session=HibernateUtil.opensession();
Transaction t = session.beginTransaction();
Car stu = session.find(Car.class, bean.getCarID());
t.commit();
session.close();
return stu;
}
public List<Car> findallStudent()
{
Session session=HibernateUtil.opensession();
Transaction t = session.beginTransaction();
Query query = session.createQuery("from Student");
List<Car> list = query.list();
System.out.println(list);
t.commit();
session.close();
return list;
}
}
Utill:
package com.car.Utill;
import org.hibernate.Session;
import org.hibernate.SessionFactory;
import org.hibernate.cfg.Configuration;
public class HibernateUtil {
```

```
public static Session opensession()
{
Configuration cfg = new Configuration().configure("hibernate.cfg.xml");
SessionFactory factory = cfg.buildSessionFactory();
Session session = factory.openSession();
return session;
}
}
Index.jsp
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Index page</title>
</head>
<body>
<iframe src="banner" width="100%" height="10%" style="border: none;"></iframe>
<iframe src="Link1" width="10%" height="450px" style="border: none;"></iframe>
<iframe src="insert" width="89.7%" height="450px" style="border: none;"</pre>
name="operation"></iframe>
</body>
</html>
</body>
</html>
Link1.jsp

page language="java" contentType="text/html; charset=ISO-8859-1"
pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Index page</title>
</head>
<body>
<iframe src="banner" width="100%" height="10%" style="border: none;"></iframe>
<iframe src="Link1" width="10%" height="450px" style="border: none;"></iframe>
```

```
<iframe src="insert" width="89.7%" height="450px" style="border: none;"</pre>
name="operation"></iframe>
</body>
</html>
</body>
</html>
INSERT.JSP
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
pageEncoding="ISO-8859-1"%>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
klink
href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.min.css"
rel="stylesheet"
integrity="sha384-T3c6CoIi6uLrA9TneNEoa7RxnatzjcDSCmG1MXxSR1GAsXEV/Dwwykc2MPK8M2HN"
crossorigin="anonymous">
<link rel="stylesheet"</pre>
href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-
awesome.min.css">
<style type="text/css">
body {<!--
background-image: url(''); -->
background-size: cover;
font-size: 16px;
margin-left: 30%;
margin-top: 20px;
font-weight: bold;
}
.form-group {
display: -ms-flexbox;
display: flex;
width: 100%;
margin-bottom: 15px;
}
.form-group>label {
margin-right: 1rem;
width: 4rem;
}
```

```
.card {
box-shadow: 4px 4px 8px 8px rgba(0, 0, 0, 0.2);
transition: 0.3s;
}
.card:hover {
box-shadow: 5px 8px 16px 9px rgba(0, 0, 0, 0.2);
}
.icon {
padding: 10px;
background:;
color: white;
min-width: 50px;
text-align: center;
</style>
</head>
<body>
<div class="card w-50">
<div class="card-header text-center">
<h5>Enter the Car Details :</h5>
</div>
<div class="card-body">
<form action="Insertion" modelAttribute="bean">
<div class="form-group">
<label for="carId"> <i class="fa fa-id-card icon"></i></label> <input</pre>
type="text" id="id" name="CarID" autocomplete="off"
placeholder="Car ID" class="form-control" required="required" />
</div>
<div class="form-group">
<label for="carModel"><i class="fa fa-book icon"></i></label> <input</pre>
type="text" name="CarModel" autocomplete="off"
placeholder="Car Model" class="form-control" required="required" />
</div>
<div class="form-group">
<label for="carType"><i class="fa fa-book icon"></i></label> <input</pre>
type="text" name="CarType" autocomplete="off"
placeholder="Car Type" class="form-control" required="required" />
```

```
</div>
<div class="form-group">
<label for="Rate per km"><i class="fa fa-book icon"></i></label> <input</pre>
type="text" name="Rate_per_km" autocomplete="off"
placeholder="Rate per KM" class="form-control" required="required" />
</div>
<div class="form-group">
<label for="seatCapacity"><i class="fa fa-pencil icon"></i></label>
<input type="text" name="Seat_Capacity" autocomplete="off"</pre>
placeholder="Seat Capacity" class="form-control"
required="required" />
</div>
<div class="form-group" style="text-align: right;">
<button type="submit" class="btn btn-primary btn-md" name="button"</pre>
value="insert">
<i class="fa fa-plus"></i> Insert
</button>
</div>
</form>
</div>
</div>
</body>
</html>
Delete:
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
pageEncoding="ISO-8859-1"%>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
klink
href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.min.css"
rel="stylesheet"
integrity="sha384-T3c6CoIi6uLrA9TneNEoa7RxnatzjcDSCmG1MXxSR1GAsXEV/Dwwykc2MPK8M2HN"
crossorigin="anonymous">
<link rel="stylesheet"</pre>
```

```
href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-
awesome.min.css">
<style type="text/css">
body {<!--
background-image: url(''); -->
background-size: cover;
font-size: 16px;
margin-left: 30%;
margin-top: 20px;
font-weight: bold;
}
.form-group {
display: -ms-flexbox;
display: flex;
width: 100%;
margin-bottom: 15px;
}
.form-group>label {
margin-right: 1rem;
width: 4rem;
}
.card {
box-shadow: 4px 4px 8px 8px rgba(0, 0, 0, 0.2);
transition: 0.3s;
}
.card:hover {
box-shadow: 5px 8px 16px 9px rgba(0, 0, 0, 0.2);
}
.icon {
padding: 10px;
background:;
color: white;
min-width: 50px;
text-align: center;
</style>
</head>
<body>
<div class="card w-50">
<div class="card-header text-center">
```

```
<h5>Enter the Car Details :</h5>
</div>
<div class="card-body ">
<form action="Insertion" modelAttribute="bean">
<div class="form-group">
<label for="carId"> <i class="fa fa-id-card icon"></i></label> <input</pre>
type="text" id="id" name="CarID" autocomplete="off"
placeholder="Car ID" class="form-control" required="required" />
</div>
<div class="form-group">
<label for="carModel"><i class="fa fa-book icon"></i></label> <input</pre>
type="text" name="CarModel" autocomplete="off"
placeholder="Car Model" class="form-control" required="required" />
</div>
<div class="form-group">
<label for="carType"><i class="fa fa-book icon"></i></label> <input</pre>
type="text" name="CarType" autocomplete="off"
placeholder="Car Type" class="form-control" required="required" />
</div>
<div class="form-group">
<label for="Rate per km"><i class="fa fa-book icon"></i></label> <input</pre>
type="text" name="Rate_per_km" autocomplete="off"
placeholder="Rate per KM" class="form-control" required="required" />
</div>
<div class="form-group">
<label for="seatCapacity"><i class="fa fa-pencil icon"></i></label>
<input type="text" name="Seat_Capacity" autocomplete="off"</pre>
placeholder="Seat Capacity" class="form-control"
required="required" />
</div>
<div class="form-group" style="text-align: right;">
<button type="submit" class="btn btn-primary btn-md" name="button"</pre>
value="insert">
<i class="fa fa-plus"></i> Insert
</button>
```

```
</div>
</form>
</div>
</div>
</body>
</html>
Update.jsp
<%@page import="com.car.bean.Car"%>
<%@page import="java.util.ArrayList"%>
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
pageEncoding="ISO-8859-1"%>
<%@taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core"%>
<%@ page isELIgnored="false"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Update Page</title>
k
href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.min.css"
rel="stylesheet"
integrity="sha384-T3c6CoIi6uLrA9TneNEoa7RxnatzjcDSCmG1MXxSR1GAsXEV/Dwwykc2MPK8M2HN"
crossorigin="anonymous">
<link rel="stylesheet"</pre>
href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-
awesome.min.css">
<style type="text/css">
body {
background-image: url('');
background-size: cover;
font-size: 16px;
margin: 0;
display: flex;
justify-content: center;
align-items: center;
height: 100vh;
font-weight: bold;
background-color: #f8f9fa;
}
.input-icon {
position: relative;
```

```
margin-bottom: 1rem;
}
.input-icon>i {
position: absolute;
left: 0.5rem;
top: 0.35rem;
color: #495057;
.input-icon>input {
padding-left: 2rem;
border-radius: 0.25rem;
border: 2px solid #495057;
}
.form-group {
display: flex;
align-items: center;
margin-bottom: 1.5rem;
}
.form-group>label {
margin-right: 1rem;
width: 4rem;
}
.icon {
padding: 10px;
background: black;
color: white;
min-width: 50px;
text-align: center;
}
.form-group {
display: -ms-flexbox;
display: flex;
width: 100%;
margin-bottom: 15px;
}
.card {
box-shadow: 0 4px 8px 0 rgba(0, 0, 0, 0.2);
transition: 0.3s;
```

```
border-radius: 15px;
margin-top: 50px;
.card:hover {
box-shadow: 0 8px 16px 0 rgba(0, 0, 0, 0.2);
.card-header {
/* background-color: #495057; */
color: black;
border-top-left-radius: 15px;
border-top-right-radius: 15px;
}
.btn-primary {
border: none;
transition: 0.3s;
}
.btn-primary:hover {
background-color: #343a40;
}
</style>
</head>
<body>
<div class="card w-50">
<div class="card-header text-center">
<h5>Enter the Book Details to Update :</h5>
</div>
<div class="card-body ">
<form action="Updation" modelAttribute="bean">
<div class="form-group">
<label for="bookId"> </label> <input type="text" id="Id"</pre>
name="CarID" autocomplete="off" placeholder="Book ID"
value="${c.CarID}" class="form-control" />
```

```
</div>
<div class="form-group">
<label for="bookName"></label> <input type="text" name="CarModel"</pre>
autocomplete="off" placeholder="Book Name" class="form-control"
value="${c.CarModel}" />
</div>
<div class="form-group">
<label for="author"></label> <input type="text" name="CarType"</pre>
autocomplete="off" placeholder="Author Name" value="${c.CarType}"
class="form-control" />
</div>
<div class="form-group">
<label for="author"></label> <input type="text" name="Rate_per_km"</pre>
autocomplete="off" placeholder="Author Name"
value="${c.Rate_per_km}" class="form-control" />
</div>
<div class="form-group">
<label for="author"></label> <input type="text"</pre>
name="Seat_Capacity" autocomplete="off" placeholder="Author Name"
value="${c.Seat_Capacity}" class="form-control" />
</div>
<div class="form-group" style="text-align: right;">
<button type="submit" class="btn btn-primary btn-md " name="button"</pre>
value="Update">
<i class="fa fa-refresh"></i> Update
</button>
</div>
</form>
<form action="fetch" modelAttribute="bean">
<select class="form-select form-select-sm"</pre>
aria-label=".form-select-sm example" name="id">
<option selected>Car ID</option>
```

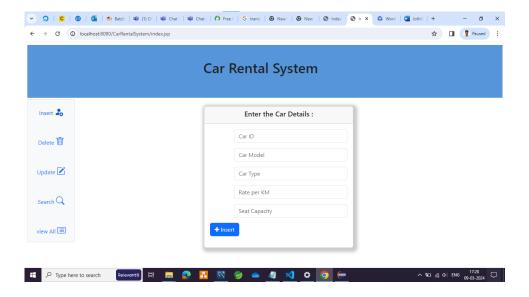
```
<c:forEach items="${idlist}" var="id">
<option value="${id}">${id}</option>
</c:forEach>
</select><br>
<div class="form-group" style="text-align: right;">
<input type="submit" class="btn btn-warning" value="fetch" /><i</pre>
class="fa-solid fa-hand-holding"></i></i>
</div>
</form>
</div>
</div>
</div>
</body>
</html>
View:
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Search Page</title>
klink
href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.min.css"
rel="stylesheet"
integrity="sha384-T3c6CoIi6uLrA9TneNEoa7RxnatzjcDSCmG1MXxSR1GAsXEV/Dwwykc2MPK8M2HN"
crossorigin="anonymous">
<link rel="stylesheet"</pre>
href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-
awesome.min.css">
<style type="text/css">
body {
background-image: url('');
background-size: cover;
font-size: 16px;
margin-left: 30%;
margin-top: 110px;
font-weight: bold;
}
input[type="text"] {
width: 100%;
padding: 12px 20px;
```

```
margin: 8px 0;
box-sizing: border-box;
border: 2px solid #ccc;
border-radius: 4px;
}
input[type="submit"] {
color: white;
padding: 11px 20px;
margin: 8px 0;
border: none;
border-radius: 4px;
cursor: pointer;
}
td {
padding: 10px 14px;
}
.card {
box-shadow: 4px 4px 8px 8px rgba(0, 0, 0, 0.2);
transition: 0.3s;
border-radius: 5px;
background-color: #f8f9fa;
}
.card:hover {
box-shadow: 5px 8px 16px 9px rgba(0, 0, 0, 0.2);
}
.form-group {
display: flex;
align-items: center;
}
.form-group>label {
margin-right: 1rem;
width: 4rem;
}
.icon {
padding: 15px;
background: black;
color: white;
min-width: 50px;
```

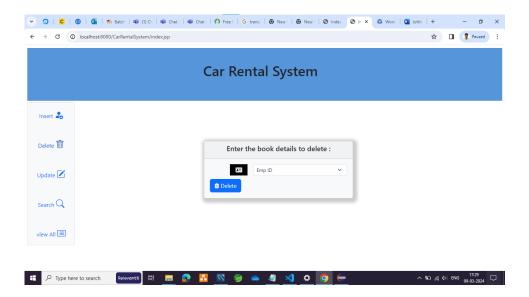
```
text-align: center;
}
.form-group {
display: -ms-flexbox;
display: flex;
width: 100%;
margin-bottom: 10px;
}
.btn {
margin: 20 50px;
}
</style>
</head>
<body>
<div class="card w-50 ">
<div class="card-header text-center">
<h5>Enter the Book Id to Search :</h5>
</div>
<div class="card-body ">
<form action="Search">
<div class=form-group>
<label for="id"> <i class="fa fa-id-card icon"></i></label>
</div>
<input type="text" name="id" autocomplete="off" placeholder="ID" />
<button type="submit" class="btn btn-primary btn-md" name="button"</pre>
value="view">
<i class="fa fa-search "></i> Search
</button>
</form>
<br>
<form action="SearchAll">
<button type="submit" class="btn btn-primary btn-md" name="button"</pre>
value="View All">
<i class="fa fa-eye"></i> View All
</button>
</form>
</div>
</div>
</body>
</html>
```

Screenshot:

Insert:



Delete:



Update:

