

**Name: Sanjay Khanna S**

**Emp ID: 12124**

**Docker Lab Assessment**



## Q24) Bus Ticket Booking System

**Answer:**

**Database:**

```
MySQL 8.0 Command Line Client
Enter password: *****
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 22
Server version: 8.0.35 MySQL Community Server - GPL

Copyright (c) 2000, 2023, Oracle and/or its affiliates.

Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

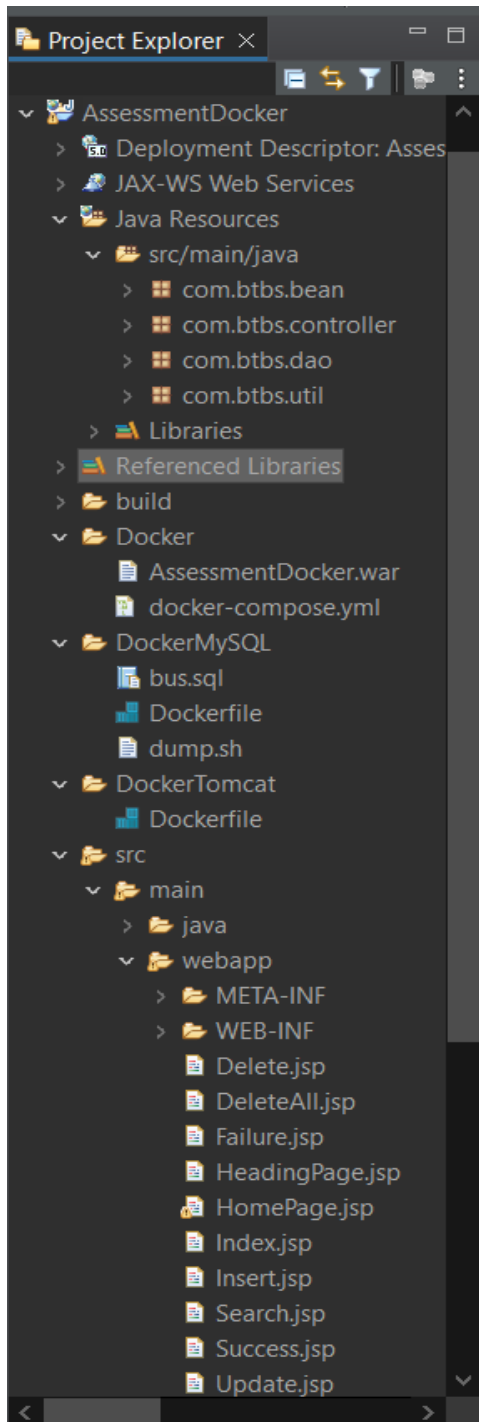
mysql> create database btbs_db;
Query OK, 1 row affected (0.03 sec)

mysql> use btbs_db;
Database changed
mysql> create table tbl_bus(ticket_id int primary key,boarding varchar(150) not null,destination varchar(150) not null,price float not null,no_of_seat int not null);
Query OK, 0 rows affected (0.05 sec)

mysql> desc tbl_bus;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| ticket_id  | int       | NO   | PRI | NULL    |       |
| boarding   | varchar(150) | NO   |     | NULL    |       |
| destination | varchar(150) | NO   |     | NULL    |       |
| price      | float     | NO   |     | NULL    |       |
| no_of_seat | int       | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.01 sec)

mysql> .
```

## Folder Structure:



--	--

## Coding:

### Docker/docker-compose.yml:

```
version: "3"

services:
  api:
    image: webapp
    container_name: mywebapp
    build:
      context: .
      dockerfile: D:\Work Space\AssessmentDocker\DockerTomcat\Dockerfile
    ports:
      - 8080:8080
  database:
    image: mysql
    container_name: jspmysql
    build:
      dockerfile: D:\Work Space\AssessmentDocker\DockerMySQL\Dockerfile
    environment:
      - MYSQL_ROOT_PASSWORD=sam@6383587926
      - MYSQL_DATABASE=jsp
    ports:
      - "6703:3306"
    volumes:
      - .DockerMySQL/jsp_backup.sql:/docker-entrypoint-initdb.d/setup.sql
      - db_data:/var/lib/mysql
volumes:
  db_data:
```



## DockerMySQL/Dockerfile:

```
FROM mysql:latest  
  
ENV MYSQL_ROOT_PASSWORD sam@6383587926  
  
ENTRYPOINT [ "dump.sh" ]
```

## DockerMySQL/Dump.sh:

```
#dump.sh  
  
mysqladmin -uroot -psam@6383587926 create jsp  
  
mysql -uroot -psam@6383587926 jsp < jsp_backup.sql  
  
#end of dump.sh
```

## DockerTomcat/Dockerfile:

```
FROM tomcat:latest  
  
COPY AssessmentDocker.war /usr/local/tomcat/webapps/AssessmentDocker.war  
  
EXPOSE 8080  
  
CMD ["catalina.sh","run"]
```

## Jsp files:

### Index.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>Bus Ticket Booking System</title>
<style type="text/css">
body{
background-color: black;
}</style>
</head>
<body>
<iframe src="HeadingPage.jsp" width="100%" height="200px"
style="border:none"></iframe>
<iframe src="<%=request.getContextPath()%>/home" width="100%" height="510px"
name="Operation" style="border:none"></iframe>
</body>
</html>
```

### HeadingPage.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>Library Management System</title>
<link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztcQTWfSpd3yD65VohhpuuCOMLASjC"
crossorigin="anonymous">
<style>
body{
background-image:
url('https://png.pngtree.com/background/20210709/original/pngtree-colorful-
triangle-blue-purple-banner-background-picture-image_950564.jpg');
background-size: cover;
}
#title{
box-shadow: 5px 5px 5px 5px rgba(0,0,0,0.5);
text-align:center;
font-size: 36px;
```



```
font-weight: bold;  
margin-left: 400px;
```

```

margin-top: 10px;
}
#links{
margin-top: 33px;
}
li{
margin-left: 10px;
}
#form{
margin-left: 700px;
width: 300px;
}
</style>
</head>
<body>
<div class="card card-body w-50" id="title">Bus Ticket Booking System</div>
<nav class="navbar navbar-expand-lg navbar-light bg-light" id="links">
<div class="container-fluid">
<div class="collapse navbar-collapse">
<ul class="navbar-nav">
<li class="nav-item">
<a class="nav-link active" href="<%=request.getContextPath()%>/home"
target="Operation"><button class="btn btn-outline-success">Home</button></a>
</li>
<li class="nav-item">
<a class="nav-link" href="<%=request.getContextPath()%>/insert"
target="Operation"><button class="btn btn-outline-success">Insert</button></a>
</li>
<li class="nav-item">
<a class="nav-link" href="<%=request.getContextPath()%>/update"
target="Operation"><button class="btn btn-outline-success">Update</button></a>
</li>
<li class="nav-item">
<a class="nav-link" href="<%=request.getContextPath()%>/delete"
target="Operation"><button class="btn btn-outline-danger">Delete</button></a>
</li>
<li class="nav-item">
<a class="nav-link" href="<%=request.getContextPath()%>/deleteAll"
target="Operation"><button class="btn btn-outline-danger">DeleteAll</button></a>
</li>
</ul>
<form class="d-flex" id="form" action="search" target="Operation" >
<input class="form-control me-3" type="text" placeholder="Enter Ticket Id" aria-
label="Search" name="ticketId" autocomplete="off" required >
<button class="btn btn-outline-success" type="submit" name="button"
value="Search">Search</button>
</form>
</div>
</div>
</div>
</nav>
</body>
</html>

```



## HomePage.jsp:

```
<%@page import="com.btbs.bean.Bus"%>
<%@page import="java.util.LinkedList"%>
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Home Page</title>
<link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztcQTWFspD3yD65VohhpooCOMLASjC"
crossorigin="anonymous">
<style>
body{
background-image: url('https://www.bhmpics.com/downloads/bus-hd-images-
Wallpapers/25.5749730-bus-wallpapers.jpg');
background-size: cover;
}
#display{
margin: 30px 0px 0px 180px;
box-shadow: 8px 8px 10px 10px rgba(0,0,0,0.6);
}
</style>
</head>
<body>
<div class="card w-75" id="display">
<div class="card-header text-center h1">Book Record List</div>
<% LinkedList<Bus> list =
(LinkedList<Bus>)request.getSession().getAttribute("list"); %>
<div class="card-body">
<div class="card-text h4 mb-4">No of Record : <%=list.size()%></div>
<table class="table table-bordered table-hover text-center">
<thead>
<tr class="table-primary">
<th scope="col">Ticket Id</th>
<th scope="col">Boarding Point</th>
<th scope="col">Destination point</th>
<th scope="col">Price</th>
<th scope="col">No of seat</th>
</tr>
</thead>
<tbody>
<% for(Bus b : list){ %>
<%= "<tr><td>" + b.getTicketId() + "</td><td>" + b.getBoarding() + "</td><td>" + b.getDestina
tion() + "</td><td>" + b.getPrice() + "</td><td>" + b.getNoOfSeat() + "</td></tr>" %>
<%} %>
</tbody>
</table>
</div>
</div>
</body>
```

```
</html>
```

## Insert.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>Insert Page</title>
<link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
T3c6CoIi6uLrA9TneNEoa7RxnatzjcDSCmG1MXxSR1GAsXEV/Dwwykc2MPK8M2HN"
crossorigin="anonymous">
<style type="text/css">
body{
background-image: url('https://www.bhmpics.com/downloads/bus-hd-images-
Wallpapers/25.5749730-bus-wallpapers.jpg');
background-size: cover;
margin-left: 30%;
margin-top: 10px;
font-weight: bold;
}
td{
padding: 10px 14px;
}
#card{
box-shadow: 8px 8px 10px 10px rgba(0,0,0,0.6);
}
</style>
</head>
<body>
<div class="card w-50 " id="card">
<div class="card-header text-center"><h5>Enter the Booking to Insert : </h5></div>
<div class="card-body ">
<form action="Controller" method="post">
<table style="border:none;">
<tr><td>Enter Ticket Id </td><td>: <input type="text" name="ticketId"
autocomplete="off" placeholder="Enter Ticket id" required/> </td></tr>
<tr><td>Enter Boarding Point </td><td>: <input type="text" name="boarding"
autocomplete="off" placeholder="Enter boarding point" required/> </td></tr>
<tr><td>Enter Destination Point </td><td>: <input type="text" name="destination"
autocomplete="off" placeholder="Enter destination point" required/> </td></tr>
<tr><td>Enter Price </td><td>: <input type="text" name="price" autocomplete="off"
placeholder="Enter price" required/></td></tr>
<tr><td>Enter No of Seats </td><td>: <input type="text" name="noOfSeat"
autocomplete="off" placeholder="Enter no of seats" required/> </td></tr>
<tr><td colspan="2" style="text-align: right;"><input type="submit" class="btn
btn-primary btn-md" name="button" value="Insert"/> </td></tr>
</table>
</form>
</div>
```

```
</div>
```

```
</body>
</html>
```

## Update.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>Update Page</title>
<link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
T3c6CoTi6uLrA9TneNEoa7RxnatzjcDSCmG1MXxSR1GAsXEV/Dwwykc2MPK8M2HN"
crossorigin="anonymous">
<style type="text/css">
body{
background-image: url('https://www.bhmpics.com/downloads/bus-hd-images-
Wallpapers/25.5749730-bus-wallpapers.jpg');
background-size: cover;
margin-left: 30%;
margin-top: 10px;
font-weight: bold;
}
td{
padding: 10px 14px;
}
#card{
box-shadow: 8px 8px 10px 10px rgba(0,0,0,0.6);
}
</style>
</head>
<body>
<div class="card w-50 " id="card">
<div class="card-header text-center"><h5>Enter the Booking details to Update :
</h5></div>
<div class="card-body ">
<form action="Controller" method="post">
<table style="border:none;">
<tr><td>Enter Ticket Id </td><td>: <input type="text" name="ticketId"
autocomplete="off" placeholder="Enter Ticket id" required/> </td></tr>
<tr><td>Enter Boarding Point </td><td>: <input type="text" name="boarding"
autocomplete="off" placeholder="Enter boarding point" required/> </td></tr>
<tr><td>Enter Destination Point </td><td>: <input type="text" name="destination"
autocomplete="off" placeholder="Enter destination point" required/> </td></tr>
<tr><td>Enter Price </td><td>: <input type="text" name="price" autocomplete="off"
placeholder="Enter price" required/></td></tr>
<tr><td>Enter No of Seats </td><td>: <input type="text" name="noOfSeat"
autocomplete="off" placeholder="Enter no of seats" required/> </td></tr>
```



```
<tr><td colspan="2" style="text-align: right;"><input type="submit" class="btn  
btn-primary btn-md" name="button" value="Update"/> </td></tr>  
</table>  
</form>
```

```
</div>
</div>
</body>
</html>
```

## Delete.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>Delete Page</title>
<link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
T3c6CoIi6uLrA9TneNEoa7RxnatzjcDSCmG1MXxSR1GAsXEV/Dwwykc2MPK8M2HN"
crossorigin="anonymous">
<style type="text/css">
body{
background-image: url('https://www.bhmpics.com/downloads/bus-hd-images-
Wallpapers/25.5749730-bus-wallpapers.jpg');
background-size: cover;
font-size: 16px;
margin-left: 30%;
margin-top: 110px;
font-weight: bold;
}
td{
padding: 10px 14px;
}
#card{
box-shadow: 8px 8px 10px 10px rgba(0,0,0,0.6);
}
</style>
</head>
<body>
<div class="card w-50 " id="card">
<div class="card-header text-center"><h5>Enter the Ticket Id to Delete :
</h5></div>
<div class="card-body ">
<form action="Controller" method="post">
<table style="border:none;">
<tr><td>Enter Ticket Id </td><td>: <input type="text" name="ticketId"
autocomplete="off" placeholder="Enter ticket id" required/> </td></tr>
<tr><td colspan="2" style="text-align: right;"><input type="submit" class="btn
btn-primary btn-md" name="button" value="Delete"/> </td></tr>
</table>
</form>
</div>
</div>
```

```
</body>  
</html>
```

## DeleteAll.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>Delete All</title>
<link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
T3c6CoIi6uLrA9TneNEoa7RxnatzjcDSCmG1MXxSR1GAsXEV/Dwwykc2MPK8M2HN"
crossorigin="anonymous">
<style type="text/css">
body{
background-image: url('https://www.bhmpics.com/downloads/bus-hd-images-
Wallpapers/25.5749730-bus-wallpapers.jpg');
background-size: cover;
font-size: 16px;
margin-left: 30%;
margin-top: 110px;
font-weight: bold;
}
td{
padding: 10px 14px;
}
#card{
box-shadow: 8px 8px 10px 10px rgba(0,0,0,0.6);
}
</style>
</head>
<body>
<div class="card w-50 " id="card">
<div class="card-header text-center"><h5>Are you sure to delete all Records ?
</h5></div>
<div class="card-body ">
<form action="Controller" method="post">
<table style="border:none;">
<tr><td>Enter Password to delete </td><td>: <input type="password" name="pass"
autocomplete="off" placeholder="Enter passowrd" required/> </td></tr>
<tr><td colspan="2" style="text-align: right;"><input type="submit" class="btn
btn-primary btn-md" name="button" value="DeleteAll"/> </td></tr>
</table>
</form>
</div>
</div>
</body>
</html>
```



## Search.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>Search Page</title>
<link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
T3c6CoIi6uLrA9TneNEoa7RxnatzjcDSCmG1MXxSR1GAsXEV/Dwwykc2MPK8M2HN"
crossorigin="anonymous">
<style type="text/css">
body{
background-image: url('https://www.bhmpics.com/downloads/bus-hd-images-
Wallpapers/25.5749730-bus-wallpapers.jpg');
background-size: cover;
font-size: 16px;
margin-left: 20%;
margin-top: 110px;
font-weight: bold;
}
td{
padding: 10px 14px;
}

</style>
</head>
<body>

</body>
</html>
```

## Success.jsp

```
<%@page import="com.btbs.bean.Bus"%>
<%@page import="java.util.ArrayList"%>
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>Success page</title>
</head>
<body>
<%
String action = request.getParameter("action");

if(action.equals("Insert")){
%>
```

```
<%@include file="Insert.jsp" %>
```

```

<%= "<div class=\"card card-body w-50 text-center mt-2\"><h4>Record Inserted
Successfully</h4></div>"%>
<%
} else if (action.equals("Delete")) {
%>
<%@include file="Delete.jsp" %>
<%= "<br><div class=\"card card-body w-50 text-center\"><h4>Record Deleted
Successfully</h4></div>"%>
<%
} else if (action.equals("Update")) {
%>
<%@include file="Update.jsp" %>
<%= "<div class=\"card card-body w-50 text-center mt-2\"><h4>Record Updated
Successfully</h4></div>"%>
<%
} else if (action.equals("Search")) {
%>
<%@include file="Search.jsp" %>
<%
Bus b = (Bus) request.getSession().getAttribute("bean");
%>
<%= "<br><div class=\"card w-75\"><div class=\"card-header text-center h5\">Record
Found</div><div class=\"card-body\"><table class=\"table table-border text-
center\"><tr class=\"table-primary\" style=\"font-weight:bold\"><td>Ticket
Id</td><td>Boarding point</td><td>Destination point</td><td>Price</td><td>No of
Seat</td></tr>" %>
<%= "<tr><td>" + b.getTicketId() + "</td><td>" + b.getBoarding() + "</td><td>" + b.getDestina
tion() + "</td><td>" + b.getPrice() + "</td><td>" + b.getNoOfSeat() + "</td></tr></table></d
iv></div>" %>
<%
} else if (action.equals("DeleteAll")) {
%>
%>
<%@include file="DeleteAll.jsp" %>
<%= "<br><div class=\"card card-body w-50 text-center\"><h4>All Record Deleted
Successfully</h4></div>"%>
<%}%>
</body>
</html>

```

## Failure.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>Failure Page</title>
</head>

```



```

<body>
<%
String action = request.getParameter("action");

if(action.equals("Insert")){
%>
<%@include file="Insert.jsp" %>
<%= "<div class=\"card card-body w-50 text-center mt-2\"><h4>Insertion
Failure</h4></div>" %>
<%
}else if(action.equals("Delete")){
%>
<%@include file="Delete.jsp" %>
<%= "<br><div class=\"card card-body w-50 text-center \"><h4>Deletion
Failure</h4></div>" %>
<%
}else if(action.equals("Update")){
%>
<%@include file="Update.jsp" %>
<%= "<div class=\"card card-body w-50 text-center mt-2\"><h4>Updation
Failure</h4></div>" %>
<%
}else if(action.equals("Search")){
%>
<%@include file="Search.jsp" %>
<%= "<br><div class=\"card card-body w-75 text-center\" ><h4>No Record
Found</h4></div>" %>
<%
}else if(action.equals("DeleteAll")){
%>
<%@include file="DeleteAll.jsp" %>
<%= "<br><div class=\"card card-body w-50 text-center\"><h4>Password Incorrect or
Deletion Failure</h4></div>" %>
<%
}

%>

</body>
</html>

```

## Com.btbs.bean: Bus.java

```
package com.btbs.bean;

public class Bus {

    private int ticketId;
    private String boarding;
    private String destination;
    private float price;
    private int noOfSeat;

    public Bus(int ticketId, String boarding, String destination, float price, int
noOfSeat) {
        super();
        this.ticketId = ticketId;
        this.boarding = boarding;
        this.destination = destination;
        this.price = price;
        this.noOfSeat = noOfSeat;
    }

    public int getTicketId() {
        return ticketId;
    }

    public void setTicketId(int ticketId) {
        this.ticketId = ticketId;
    }

    public String getBoarding() {
        return boarding;
    }

    public void setBoarding(String boarding) {
        this.boarding = boarding;
    }

    public String getDestination() {
        return destination;
    }

    public void setDestination(String destination) {
        this.destination = destination;
    }

    public float getPrice() {
        return price;
    }
}
```

```

}

public void setPrice(float price) {
    this.price = price;
}

public int getNoOfSeat() {
    return noOfSeat;
}

public void setNoOfSeat(int noOfSeat) {
    this.noOfSeat = noOfSeat;
}

}

```

## Com.btbs.util: DBUtil.java

```

package com.btbs.util;

import java.sql.*;

public class DBUtil {

    private static final String url = "jdbc:mysql://localhost:3306/btbs_db";
    private static final String user = "root";
    private static final String password = "sam@6383587926";

    public static Connection getDBConnection() {
        Connection con = null;

        try {

            Class.forName("com.mysql.cj.jdbc.Driver");
            con = DriverManager.getConnection(url,user,password);

        } catch (Exception e) {
            e.printStackTrace();
        }
        return con;
    }

}

```

## Com.btbs.dao:BusDAO.java

```
package com.btbs.dao;

import java.sql.Connection;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
import java.util.LinkedList;

import com.btbs.bean.Bus;
import com.btbs.util.DBUtil;

public class BusDAO {

    private static Connection con = DBUtil.getDBConnection();
    private static LinkedList<Bus> list;

    public int insertBooking(Bus b) {
        int n=0;
        try {
            String q = "insert into tbl_bus value(?,?,?,?,?)";
            PreparedStatement ps = con.prepareStatement(q);
            ps.setInt(1, b.getTicketId());
            ps.setString(2, b.getBoarding());
            ps.setString(3, b.getDestination());
            ps.setFloat(4, b.getPrice());
            ps.setInt(5, b.getNoOfSeat());
            n = ps.executeUpdate();
        } catch (SQLException e) {
            e.printStackTrace();
        }
        return n;
    }

    public int updateBooking(Bus b) {
        int n=0;
        try {
            String q = "update tbl_bus set boarding = ?, destination = ?, price = ?,
no_of_seat = ? where ticket_id = ? ";
            PreparedStatement ps = con.prepareStatement(q);
            ps.setInt(5, b.getTicketId());
            ps.setString(1, b.getBoarding());
            ps.setString(2, b.getDestination());
            ps.setFloat(3, b.getPrice());
            ps.setInt(4, b.getNoOfSeat());
            n= ps.executeUpdate();
        } catch (SQLException e) {
            e.printStackTrace();
        }
        return n;
    }
}
```

```

    } catch (SQLException e) {
        e.printStackTrace();
    }
    return n;
}

public int deleteBooking(int id) {
    int n=0;
    try {
        String q = "delete from tbl_bus where ticket_id=?";
        PreparedStatement ps = con.prepareStatement(q);
        ps.setInt(1, id);
        n = ps.executeUpdate();
    } catch (SQLException e) {
        e.printStackTrace();
    }
    return n;
}

public boolean deleteAllBooking(String password) {
    boolean flag= true;
    try {
        String q = "delete from tbl_bus";
        Statement st = con.createStatement();
        if(DBUtil.password.equals(password))
            flag = st.execute(q);
    } catch (SQLException e) {
        e.printStackTrace();
    }
    return flag;
}

public Bus searchBooking(int id) {

    try {
        String q = "select * from tbl_bus where ticket_id = ?";
        PreparedStatement ps = con.prepareStatement(q);
        ps.setInt(1, id);
        ResultSet rs = ps.executeQuery();
        if(rs.next())
            return new Bus(rs.getInt(1), rs.getString(2), rs.getString(3), rs.getFloat(4),
                rs.getInt(5));
    } catch (SQLException e) {
        e.printStackTrace();
    }

    return null;
}

```

```

public LinkedList<Bus> veiwAllBooking(){
    list = new LinkedList<Bus>();
    try {
        String q = "select * from tbl_bus";
        PreparedStatement ps = con.prepareStatement(q);
        ResultSet rs = ps.executeQuery();
        while(rs.next())
            list.add(new Bus(rs.getInt(1), rs.getString(2), rs.getString(3), rs.getFloat(4),
rs.getInt(5)));
    } catch (SQLException e) {
        e.printStackTrace();
    }
    return list;
}
}

```

## Com.btbs.controller: Controller.java

```

package com.btbs.controller;

import jakarta.servlet.ServletException;

import jakarta.servlet.annotation.WebServlet;
import jakarta.servlet.http.HttpServlet;
import jakarta.servlet.http.HttpServletRequest;
import jakarta.servlet.http.HttpServletResponse;
import java.io.IOException;
import java.util.LinkedList;

import com.btbs.bean.Bus;
import com.btbs.dao.BusDAO;

@WebServlet("/")
public class Controller extends HttpServlet {
    private static final long serialVersionUID = 1L;
    private static BusDAO dao = new BusDAO();

    protected void doGet(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {

        String action = request.getServletPath();

        switch(action) {
            case "/insert":insert(request,response);break;
            case "/delete":delete(request,response);break;
            case "/update":update(request,response);break;
            case "/home" :viewAll(request, response);break;

```

```
case "/deleteAll":deleteAll(request, response);break;
case "/search":search(request, response);break;
default:viewAll(request, response);
}

}

private void search(HttpServletRequest request, HttpServletResponse response)
throws IOException, ServletException {
doPost(request, response);
}

private void deleteAll(HttpServletRequest request, HttpServletResponse response)
throws IOException {
response.sendRedirect("DeleteAll.jsp");
}

private void update(HttpServletRequest request, HttpServletResponse response)
throws IOException {
response.sendRedirect("Update.jsp");
}

private void delete(HttpServletRequest request, HttpServletResponse response)
throws IOException {
response.sendRedirect("Delete.jsp");
}

private void insert(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
response.sendRedirect("Insert.jsp");
}

private void viewAll(HttpServletRequest request, HttpServletResponse response)
throws IOException {

LinkedList<Bus> list = dao.veiwAllBooking();
if(list != null) {
request.getSession().setAttribute("list", list);
response.sendRedirect("HomePage.jsp");
}
}
```

```

}

@Override
protected void doPost(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
    int n=0;
    String action = request.getParameter("button");

    if(action.equals("Insert")) {
        Bus b = new Bus(Integer.parseInt(request.getParameter("ticketId")),
            request.getParameter("boarding"), request.getParameter("destination"),
            Float.parseFloat(request.getParameter("price")),
            Integer.parseInt(request.getParameter("noOfSeat")));
        n= dao.insertBooking(b);
        if(n==1) {
            response.sendRedirect("Success.jsp?action=Insert");
        }
        else {
            response.sendRedirect("Failure.jsp?action=Insert");
        }
    }

    else if(action.equals("Delete")) {
        int id = Integer.parseInt(request.getParameter("ticketId"));
        n = dao.deleteBooking(id);
        if(n==1) {
            response.sendRedirect("Success.jsp?action=Delete");
        }
        else {
            response.sendRedirect("Failure.jsp?action=Delete");
        }
    }

    else if(action.equals("Update")) {
        Bus b = new Bus(Integer.parseInt(request.getParameter("ticketId")),
            request.getParameter("boarding"), request.getParameter("destination"),
            Float.parseFloat(request.getParameter("price")),
            Integer.parseInt(request.getParameter("noOfSeat")));
        n =dao.updateBooking(b);
        if(n==1) {
            response.sendRedirect("Success.jsp?action=Update");
        }
        else {
            response.sendRedirect("Failure.jsp?action=Update");
        }
    }

    else if(action.equals("Search")) {
        int id = Integer.parseInt(request.getParameter("ticketId"));
    }

```

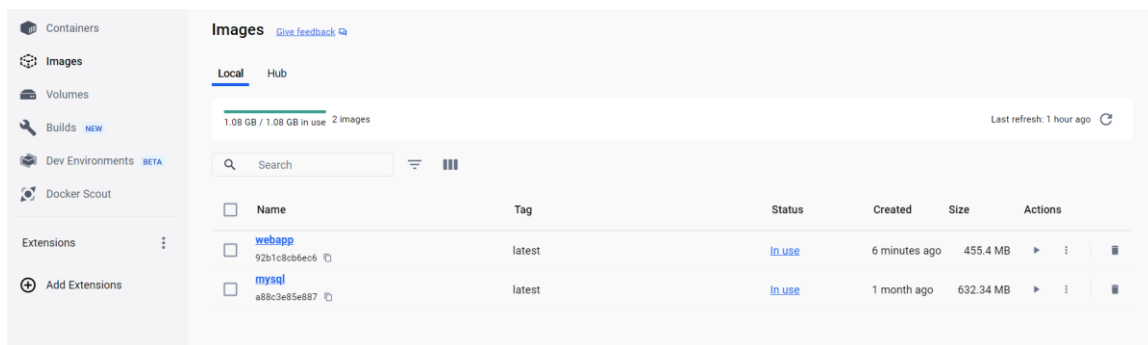


```

Bus b = dao.searchBooking(id);
if(b==null) {
response.sendRedirect("Failure.jsp?action=Search");
}else {
request.getSession().setAttribute("bean", b);
response.sendRedirect("Success.jsp?action=Search");
}
}
else if(action.equals("DeleteAll")) {
String pass = request.getParameter("pass");
boolean flag = dao.deleteAllBooking(pass);
if(flag) {
response.sendRedirect("Failure.jsp?action=DeleteAll");
}else {
response.sendRedirect("Success.jsp?action=DeleteAll");
}
}
}
}
}
}
}
}

```

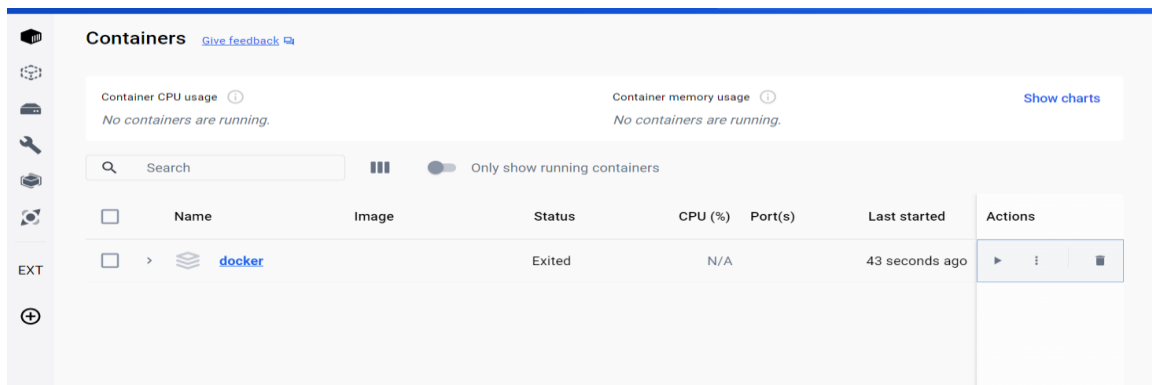
## Docker Image:



The screenshot shows the 'Images' tab in Docker Desktop. The left sidebar contains navigation options: Containers, Images (selected), Volumes, Builds, Dev Environments, Docker Scout, Extensions, and Add Extensions. The main area displays 'Local' images. A progress bar at the top indicates '1.08 GB / 1.08 GB in use' and '2 Images'. Below this is a search bar and a table of images.

Name	Tag	Status	Created	Size	Actions
webapp	latest	In use	6 minutes ago	455.4 MB	[Play] [Refresh] [Delete]
mysql	latest	In use	1 month ago	632.34 MB	[Play] [Refresh] [Delete]

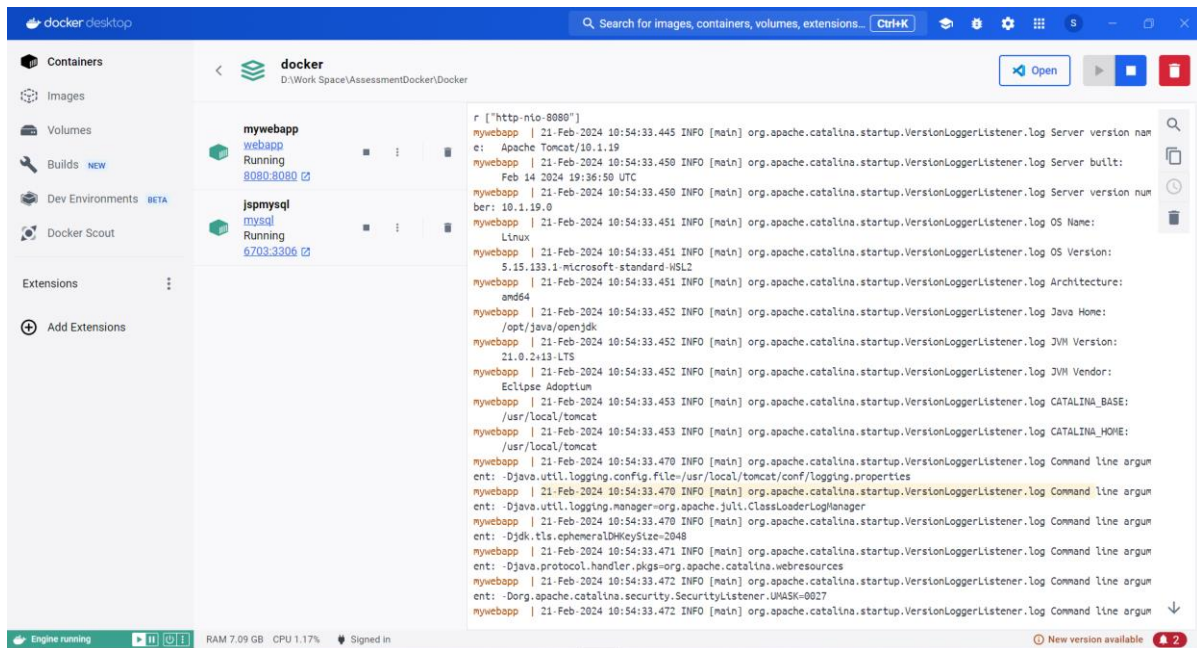
## Docker Contianer:



The screenshot shows the 'Containers' tab in Docker Desktop. The left sidebar is the same as the previous image. The main area displays container statistics and a table of containers. At the top, it shows 'Container CPU usage' and 'Container memory usage', both at 0%, with a note 'No containers are running.' and a 'Show charts' link. Below this is a search bar and a toggle for 'Only show running containers'. The table lists one container.

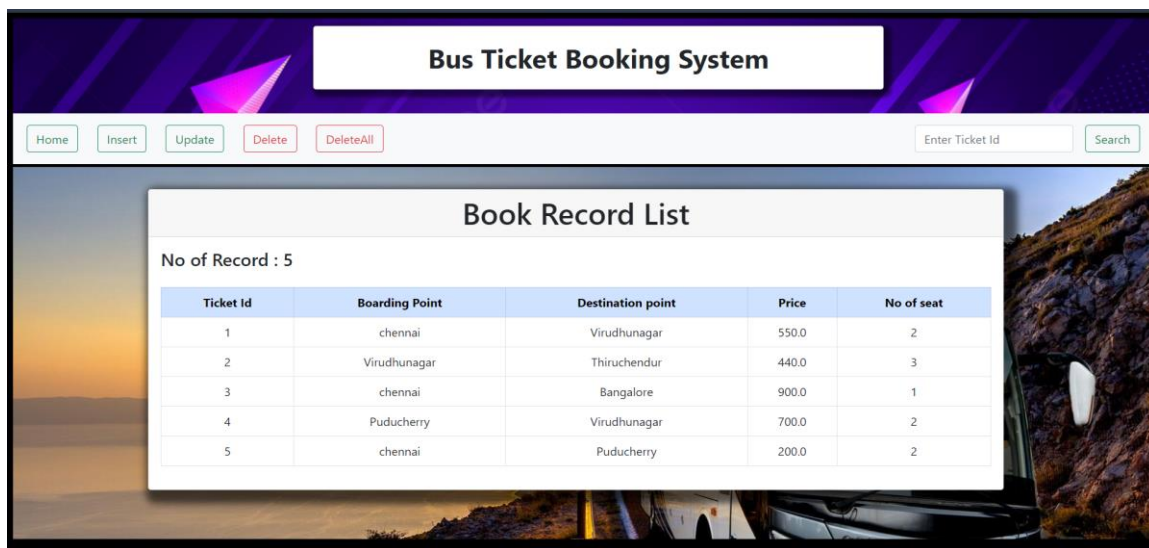
Name	Image	Status	CPU (%)	Port(s)	Last started	Actions
docker	docker	Exited	N/A		43 seconds ago	[Play] [Refresh] [Delete]

# Docker Container Running:



Output:

Home page:



## Insert:

**Bus Ticket Booking System**

Home Insert Update Delete DeleteAll Enter Ticket Id Search

Enter the Booking to Insert :

Enter Ticket Id : 6

Enter Boarding Point : Bangalore

Enter Destination Point : Chennai

Enter Price : 1500

Enter No of Seats : 5

Insert

## Insert Success page:

**Bus Ticket Booking System**

Home Insert Update Delete DeleteAll Enter Ticket Id Search

Enter the Booking to Insert :

Enter Ticket Id : Enter Ticket id

Enter Boarding Point : Enter boarding point

Enter Destination Point : Enter destination point

Enter Price : Enter price

Enter No of Seats : Enter no of seats

insert

Record Inserted Successfully

## Insert View:

**Bus Ticket Booking System**

Home Insert Update Delete DeleteAll Enter Ticket Id Search

**Book Record List**

No of Record : 6

Ticket Id	Boarding Point	Destination point	Price	No of seat
1	chennai	Virudhunagar	550.0	2
2	Virudhunagar	Thiruchendur	440.0	3
3	chennai	Bangalore	900.0	1
4	Puducherry	Virudhunagar	700.0	2
5	chennai	Puducherry	200.0	2
6	Chennai	Bangalore	1500.0	5

## Update:

**Bus Ticket Booking System**

Home Insert Update Delete DeleteAll Enter Ticket Id Search

Enter the Booking details to Update :

Enter Ticket Id : 6

Enter Boarding Point : Chennai

Enter Destination Point : Bangalore

Enter Price : 1600

Enter No of Seats : 3

Update

## Update Success

**Bus Ticket Booking System**

Home Insert Update Delete DeleteAll Enter Ticket Id Search

Enter the Booking details to Update :

Enter Ticket Id : Enter Ticket id

Enter Boarding Point : Enter boarding point

Enter Destination Point : Enter destination point

Enter Price : Enter price

Enter No of Seats : Enter no of seats

Update

Record Updated Successfully

## Update View

**Bus Ticket Booking System**

Home Insert Update Delete DeleteAll Enter Ticket Id Search

**Book Record List**

No of Record : 6

Ticket Id	Boarding Point	Destination point	Price	No of seat
1	chennai	Virudhunagar	550.0	2
2	Virudhunagar	Thiruchendur	440.0	3
3	chennai	Bangalore	900.0	1
4	Puducherry	Virudhunagar	700.0	2
5	chennai	Puducherry	200.0	2
6	Chennai	Bangalore	1600.0	3



## Delete:

The screenshot shows the 'Bus Ticket Booking System' web application. The header includes navigation buttons: Home, Insert, Update, Delete, and DeleteAll. A search bar on the right contains the number '2'. The main content area features a large background image of a bus on a road at sunset. Overlaid on this is a modal form titled 'Enter the Ticket Id to Delete :'. The form contains a label 'Enter Ticket Id :', a text input field with the value 'd', and a blue 'Delete' button.

## Delete success:

This screenshot shows the same web application after a successful deletion. The modal form now displays the message 'Record Deleted Successfully' in a green box. The 'Enter Ticket Id' input field is now empty and labeled 'Enter ticket id'. The 'Delete' button remains visible.

## Delete View:

The screenshot displays the 'Book Record List' table within the web application. The table has a title 'Book Record List' and a subtitle 'No of Record : 5'. It contains five rows of data with columns for Ticket Id, Boarding Point, Destination point, Price, and No of seat.

Ticket Id	Boarding Point	Destination point	Price	No of seat
1	chennai	Virudhunagar	550.0	2
2	Virudhunagar	Thiruchendur	440.0	3
3	chennai	Bangalore	900.0	1
4	Puducherry	Virudhunagar	700.0	2
5	chennai	Puducherry	200.0	2

## Search:

The screenshot shows the 'Bus Ticket Booking System' interface. At the top, there's a navigation bar with buttons: Home, Insert, Update, Delete, and DeleteAll. A search bar on the right contains the number '2' and a 'Search' button. Below the navigation bar, a modal window titled 'Book Record List' is displayed. It shows 'No of Record : 6' and a table with 5 columns: Ticket Id, Boarding Point, Destination point, Price, and No of seat. The table contains 6 rows of data.

Ticket Id	Boarding Point	Destination point	Price	No of seat
1	chennai	Virudhunagar	550.0	2
2	Virudhunagar	Thiruchendur	440.0	3
3	chennai	Bangalore	900.0	1
4	Puducherry	Virudhunagar	700.0	2
5	chennai	Puducherry	200.0	2
6	Chennai	Bangalore	1500.0	5

## Search success

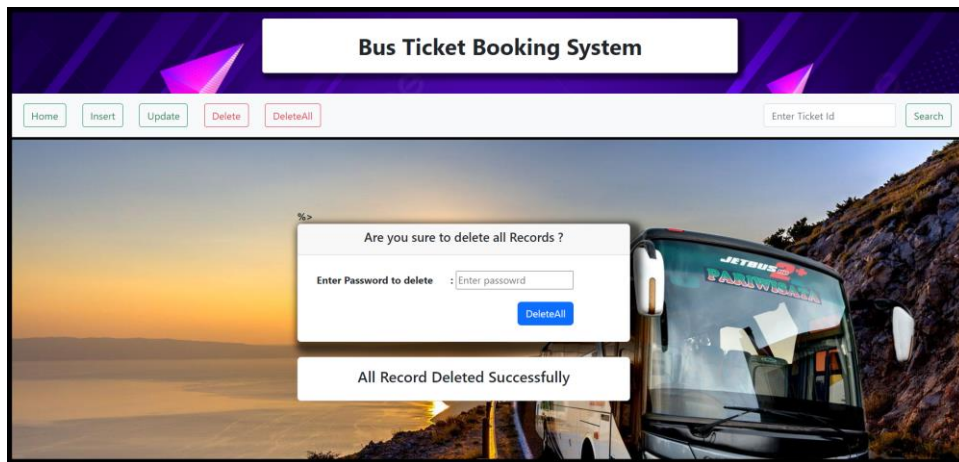
The screenshot shows the 'Bus Ticket Booking System' interface after a successful search. The search bar now contains '2' and the 'Search' button is highlighted in green. A modal window titled 'Record Found' is displayed, showing a table with 5 columns: Ticket Id, Boarding point, Destination point, Price, and No of Seat. The table contains 1 row of data, which matches the record with Ticket Id 2 from the previous screenshot.

Ticket Id	Boarding point	Destination point	Price	No of Seat
2	Virudhunagar	Thiruchendur	440.0	3

## DeleteAll :

The screenshot shows the 'Bus Ticket Booking System' interface with the 'DeleteAll' button highlighted in red. A modal window titled 'Are you sure to delete all Records ?' is displayed. It contains a text input field labeled 'Enter Password to delete' with a password mask (dots) and a 'DeleteAll' button.

## Delete All Success:



## Delete All View:

