Three-Tier Application

Date: 17.03.2023

Aim:

Ex No:9

To write Three-Tier Application program for the give programs.

9.Create a database schema that contains a table called "orders" with the following columns:

```
1. order id (int, primary key)
```

2.customer name (varchar)

3.product name (varchar)

4.quantity (int)

unit price (double)

Write a JSP program that connects to the database using JDBC and retrieves the following information:

- 1. The total number of orders in the database.
- 2. The total revenue generated by all orders.
- 3. The average order value (total revenue divided by total number of orders).

Once you have retrieved this information, create a JSP page that displays this information in a table format

Algorithm:

Step1:Begin by creating a new database with a suitable name.

Step2:Create a new table called "orders" using the CREATE TABLE statement.

Step3:Define the columns of the "orders" table

Step4:Save the table in the database.

Step5:Load the JDBC driver using the Class.forName() method.

Step6:Use HTML and JSP tags to create a table..

Step7:Display the retrieved data in the table using the ResultSet.getString() and out.print()methods.

Step8:Close the ResultSet, Statement, and Connection objects.

Program:

```
<%@ page import="java.sql.*" %>
<%@ page contentType="text/html;charset=UTF-8" language="java" %>
<%
    Class.forName("com.mysql.jdbc.Driver");
    String url = "jdbc:mysql://localhost:3306/testjsp";
    String user = "root";</pre>
```

```
String password = "";
  Connection conn = DriverManager.getConnection(url, user, password);
  Statement stmt = conn.createStatement();
  ResultSet rs = stmt.executeQuery("SELECT COUNT(*) AS total orders, SUM(quantity *
unit price) AS total revenue FROM orders");
 rs.next();
  int total_orders = rs.getInt("total_orders");
  double total revenue = rs.getDouble("total revenue");
  double average order value = total revenue / total orders;
%>
>
   Total number of orders
   >
   Total revenue generated by all orders
   Average order value
   <%= average order value %>
```

Output:

Total number of orders	10
Total revenue generated	12000
Average order value	1200

Result:

The algorithm internet programming and output for the given programs have been created successfully.