WEB TECHNOLOGY LABORATORY

ASSIGNMENT 5

Implement the sample program demonstrating the use of Servlet.

e.g., Create a database table ebookshop (book_id, book_title, book_author, book_price, quantity) using database like Oracle/MySQL etc. and display (use SQL select query) the table content using servlet.

CODE

ebookclass.java

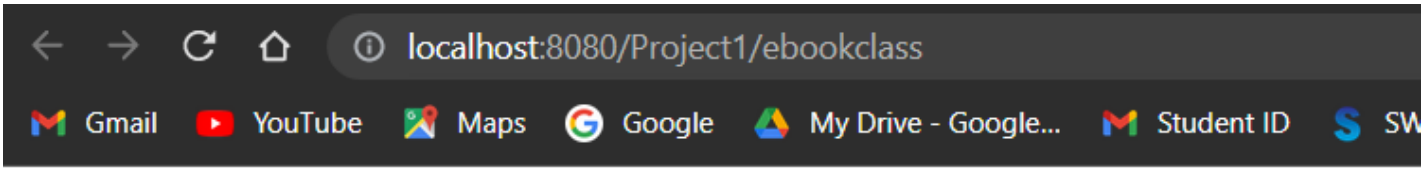
```
package ebookpkg;

import java.io.IOException;
import java.io.PrintWriter;
import java.sql.DriverManager;
import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.Statement;

import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

/**
 * Servlet implementation class ebookclass
 */
@WebServlet("/ebookclass")
public class ebookclass extends HttpServlet {
     private static final long serialVersionUID = 1L;

    /**
     * @see HttpServlet#HttpServlet()
     */
    public ebookclass() {
        super();
    }

     /**
      * @see HttpServlet#doGet(HttpServletRequest request,
HttpServletResponse response)
      */
     protected void doGet(HttpServletRequest request, HttpServletResponse
response) throws ServletException, IOException {

                    response.setContentType("text/html");
                    PrintWriter out = response.getWriter();
                    out.println("<html>");
```

```
                        out.println("<head><title>Query
Response</title></head>");
                        out.println("<body>");
                        try
                        {
                              String dbDriver = "com.mysql.jdbc.Driver";
                              String dbURL = "jdbc:mysql://localhost:3306/";
                              String dbName = "books";
                              String dbUsername = "root";
                              String dbPassword = "Sudarshan";
                              //load JDBC driver
                              Class.forName(dbDriver);

                              // Step 1: Allocate a database 'Connection'
object
                              Connection conn =
DriverManager.getConnection(dbURL + dbName, dbUsername, dbPassword);

                              // Step 2: Allocate a 'Statement' object in the
Connection
                              Statement stmt = conn.createStatement();

                              // Step 3: create and Execute a SQL SELECT query
                              String sqlStr = "select * from ebookshop";
                              ResultSet rset = stmt.executeQuery(sqlStr);  //
Send the query to the server
                              // Step 4: Process the query result set
                              int count = 0;
                              out.println("<table border='1' style='border-
collapse:collapse; border-radius: 10px;border: 1px solid white;background-
color: #96D4D4'><tr><td> Book ID </td> <td>Book Author </td> <td>Book
Name</td> <td>Book Price</td> <td>Quantity</td> </tr>");
                              while(rset.next()) {
                             out.println("<tr><td>" +
rset.getString("book_id")
                                + "</td><td>" + rset.getString("book_name")
                                + "</td><td>" + rset.getString("book_author")
                                + "</td><td>Rs. " +
rset.getDouble("book_price")
                                + "</td><td>" + rset.getInt("quantity") +
"</td></tr>");
                                   count++;
                              }
                              rset.close();
                              stmt.close();
                              conn.close();
                              out.println("<p>==== " + count + " records found
=====</p>");
                        }
                        catch(Exception ex)
                        {
                           out.println("<p>Error: " + ex.getMessage() +
"</p>");
                           out.println("<p>Check Tomcat console for
details.</p>");
                           ex.printStackTrace();
```

```
                        }
                        out.println("</body></html>");
                        out.close();
}
      /**
       * @see HttpServlet#doPost(HttpServletRequest request,
HttpServletResponse response)
       */
      protected void doPost(HttpServletRequest request, HttpServletResponse
response) throws ServletException, IOException {
            doGet(request, response);
      }
}
```

OUTPUT / SCREENSHOTS

```
mysql> use BOOKS;
Database changed
mysql> select * from EBOOKSHOP;
+---------+---------------------+-----------------+------------+----------+
| book_id | book_name           | book_author     | book_price | quantity |
+---------+---------------------+-----------------+------------+----------+
| ID01    | INCREDIBLE PUNE     | SUDARSHAN VETAL |        999 |       50 |
| ID02    | STRINGS ATTACHED    | SUMIT SHARMA    |        949 |       60 |
| ID03    | INTELLIGENT ACTS    | HARDIK MAIND    |        899 |       75 |
| ID04    | IDEAL SUCCESS       | ADITYA MANCHARE |        900 |       40 |
| ID05    | BEYOND SOCIAL MEDIA | AVISHKAR PAGARE |        849 |       50 |
| ID06    | LIVE EACH MOMENT    | MANDAR VEER     |        899 |       40 |
+---------+---------------------+-----------------+------------+----------+
6 rows in set (0.00 sec)

mysql>
```



===== 6 records found =====

Book ID	Book Author	Book Name	Book Price	Quantity
ID01	INCREDIBLE PUNE	SUDARSHAN VETAL	Rs. 999.0	50
ID02	STRINGS ATTACHED	SUMIT SHARMA	Rs. 949.0	60
ID03	INTELLIGENT ACTS	HARDIK MAIND	Rs. 899.0	75
ID04	IDEAL SUCCESS	ADITYA MANCHARE	Rs. 900.0	40
ID05	BEYOND SOCIAL MEDIA	AVISHKAR PAGARE	Rs. 849.0	50
ID06	LIVE EACH MOMENT	MANDAR VEER	Rs. 899.0	40