```java
import java.io.IOException;
import java.io.InputStream;
import java.io.PrintWriter;
import java.math.BigDecimal;
import java.sql.CallableStatement;
import java.sql.ResultSet;
import java.sql.ResultSetMetaData;
import java.sql.SQLException;
import java.sql.Statement;
import java.util.Properties;

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

import com.ecommerce.DBConnection;

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

    /**
* @see HttpServlet#HttpServlet()
*/
    public ProductDetails() {
        super();
        // TODO Auto-generated constructor stub
    }

	/**
	 * @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse
response)
	 */
	protected void doGet(HttpServletRequest request, HttpServletResponse
response) throws ServletException, IOException {
		// TODO Auto-generated method stub

		try {
			PrintWriter out = response.getWriter();
			out.println("<html><body>");

			InputStream in =
getServletContext().getResourceAsStream("/WEB-INF/config.properties");
			Properties props = new Properties();
			//props.load(in);

			//connection information
			DBConnection conn = new
DBConnection("jdbc:mysql://localhost:3306/ecommerce", "root", "root");
```

```
                        Statement stmt =
conn.getConnection().createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,
ResultSet.CONCUR_READ_ONLY);
                        stmt.executeUpdate("insert into eproduct (name, price,
date_added) values ('New Product', 17800.00, now())");

                        //query the table and get all information
                        ResultSet rst = stmt.executeQuery("select * from
pets.product");

                        //find what the user typed into the search box
                        String productSearch = request.getParameter("search");
                        //out.println(productSearch);

                        //user hasn't typed anything so display table
                        if(productSearch == null)
                        {
                               out.println("The following are the elements in the
Pets table" + "<Br>" + "<Br>");
                               //simple while loop to print all elements in table
                               while (rst.next()) {
                                      out.println(rst.getInt("ID") + ": " +
rst.getString("color") + " "
                                                    + rst.getString("name") + " costs: $" +
rst.getDouble("price") + "<Br>");
                               }
                        }
                        //user typed something
                        else
                        {
                          //select the row corresponding to the id number
                          String sql_res= "select * from pets.product where id=" +
productSearch;
                            ResultSet inTable = stmt.executeQuery(sql_res);

                            //if not empty then print all product details
                            if(inTable.next())
                                 out.println(inTable.getInt("ID") + ": " +
inTable.getString("color") + " "
                                              + inTable.getString("name") + " costs: $" +
inTable.getDouble("price") + "<Br>");
                            //empty so print error message
                            else
                                 out.println("There was no element with product ID: "
+ productSearch + " found in the table, please try again");

                        }

                        stmt.close();



                        out.println("</body></html>");
                        conn.closeConnection();
```

```
                } catch (ClassNotFoundException e) {
                        e.printStackTrace();
                } catch (SQLException e) {
                        e.printStackTrace();
                }
        }

        /**
         * @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse
response)
         */
        protected void doPost(HttpServletRequest request, HttpServletResponse
response) throws ServletException, IOException {
                // TODO Auto-generated method stub
                doGet(request, response);
        }

}
```

```java
package com.ecommerce;


import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.SQLException;

public class DBConnection {

	private Connection connection;

	public DBConnection(String dbURL, String user, String pwd) throws
ClassNotFoundException, SQLException{

		Class.forName("com.mysql.jdbc.Driver");
		this.connection = DriverManager.getConnection(dbURL, user, pwd);
	}

	public Connection getConnection(){
		return this.connection;
	}

	public void closeConnection() throws SQLException {
		if (this.connection != null)
			this.connection.close();
	}
}
```

```
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Retrieve Product Details using ID</title>
</head>
<body>
<a href="list">Click here to view the table</a><br><br>
      <form name="loginForm" method="post" action="list">
    Enter the product id number of the pet you would like to search for:<br> <input
type="text" name="search"/> <br/>
    <input type="submit" value="Submit" />
</form>
</body>
</html>
```

```
Drop table pets.product;
CREATE TABLE pets.product(
id INT(11) AUTO_INCREMENT,
name VARCHAR(256),
color VARCHAR(256),
price DECIMAL(19,2),
PRIMARY KEY (`id`)
);
```