Product ID WiteUp

#Algorithm

1. Start.

2. Create a MySQL database named "Products" if it doesn't exist.

3. Create the "product" table in the "Products" database using the provided SQL query.

4. Prepopulate the "product" table with sample data using the provided SQL insert query.

5. Create an HTML file with a form that allows users to enter a product ID.

6. Style the HTML page with appropriate formatting and headings.

7. Create a servlet named "ProductServlet" that extends HttpServlet.

8. Override the doGet() method in the "ProductServlet" class.

9. Within the doGet() method:

   - Retrieve the product ID parameter from the request.

   - Establish a connection to the MySQL database using the provided DBConnection class.

   - Define a SQL query to retrieve the product details from the "product" table based on the provided ID.

   - Prepare the SQL statement with the product ID parameter.

   - Execute the SQL query and obtain the result set.

   - If a product is found (i.e., the result set has at least one row):

     - Retrieve the product details from the result set (ID, name, description, price).

     - Set the response content type to "text/html".

     - Generate and send the HTML response containing the retrieved product details.

   - If no product is found (i.e., the result set is empty):

     - Set the response content type to "text/html".

     - Generate and send an HTML response indicating that the product was not found.

   - Close the database connection, result set, and statement using the provided DBConnection class.

10. Configure the web application deployment descriptor (web.xml) to map the servlet to the appropriate URL.

11. Package the HTML file and servlet Java file into a WAR file.

12. Deploy the WAR file to a web server or servlet container (e.g., Apache Tomcat).

13. Start the web server or servlet container.

14. Access the application using the appropriate URL in a web browser.

15. Enter a product ID in the form and submit it.

16. The servlet retrieves the product details from the database and displays them to the user.

17. End.