

# Retrieving the Product Details Using the Product ID

## Index.html-

```
<!DOCTYPE html>
<html>
<head>
<title>Product Details</title>
</head>
<body>
<h2>Product Details</h2>
<form action="ProductServlet" method="GET">
<label for="productId">Enter Product ID:</label>
<input type="text" id="productId" name="productId">
<br><br>
<input type="submit" value="Submit">
</form>
</body>
</html>
```

## Product Class

```
package phase2project2;

public class Product {
    private int id;
    private String name;
    private double price;
    public Product() {
    }
    public Product(int id, String name, double price)
    {
        this.id = id; this.name = name; this.price = price;
    }
    // Getters and setters
    public int getId() { return id;
    //}
    public void setId(int id) {
        this.id = id;
    }
    public String getName() {
        return name;
    }
    public void setName(String name) {
        this.name = name;
    }
    public double getPrice() {
        return price;
    }
    public void setPrice(double price) {
        this.price = price;
    }
}
```

## ProductServlet:

```
package phase2project2;

import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.ServletResponse;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

import com.mysql.cj.jdbc.Driver;

//import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
//import javax.servlet.ServletException;
//import javax.servlet.http.HttpServlet;
//import javax.servlet.http.HttpServletRequest;
//import javax.servlet.http.HttpServletResponse;
//import com.mysql.cj.jdbc.Driver;
//import com.mysql.cj.jdbc.Driver;

/**
 * Servlet implementation class ProductServlet
 */
public class ProductServlet extends HttpServlet {
    private static final long serialVersionUID = 1L;

    /**
     * @see HttpServlet#HttpServlet()
     */
    //public class ProductServlet extends HttpServlet { private static final
    long serialVersionUID = 1L;
        // Database connection details
        private static final String DB_URL =
"jdbc:mysql://localhost:3366/products";
        private static final String DB_USERNAME = "Rock";
        private static final String DB_PASSWORD = "aadi@123";

        // public ProductServlet() {
        //     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
```

```

        //response.getWriter().append("Served at:
").append(request.getContextPath());
        try {
            Class.forName("com.mysql.jdbc.Driver");

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

        // Retrieve the product ID from the request
        String productId = request.getParameter("productId");
        // Validate the product ID (add your own validation logic)
        if (productId == null || productId.isEmpty()) {
            response.sendError(HttpServletResponse.SC_BAD_REQUEST, "Product ID
is required");
            return;
        }
        // Database connection objects
        Connection conn = null;
        PreparedStatement stmt = null;
        ResultSet rs = null;

        //private String id;
        try {
            // Establish a connection to the database
            DriverManager.registerDriver(new Driver());
            conn = DriverManager.getConnection(DB_URL, DB_USERNAME,
DB_PASSWORD);
            // Prepare the SQL statement to retrieve product details
            String sql = "SELECT * FROM products WHERE id = ?";
            stmt = conn.prepareStatement(sql);
            stmt.setString(1, productId);

            ServletResponse response1 = null;
            //Execute the query
            rs = stmt.executeQuery();
            //Prepare the response
            response.setContentType("text/html");
            PrintWriter out = response.getWriter();
            // Display the product details in the response
            if (rs.next()) { int id = rs.getInt("id");
            String name = rs.getString("name");
            double price = rs.getDouble("price");
            //PrintWriter out;
            out.println("<html><body>");
            out.println("<h2>Product Details</h2>");
            out.println("<p>ID: " + id + "</p>");

            out.println("<p>Name: " + name + "</p>");
            out.println("<p>Price: " + price + "</p>");
            out.println("</body></html>");
        }
        else {
            out.println("<html><body>");
            out.println("<h2>Product Not Found</h2>");
            out.println("</body></html>");
        }
    }
    catch (SQLException e)

```

```

{
    e.printStackTrace();
}
finally {
    // Close the database
    if (rs != null) { try { rs.close();
    } catch (SQLException e) { e.printStackTrace();
    }
    }
    if (stmt != null) { try { stmt.close();
    } catch (SQLException e) {
        e.printStackTrace();
    }
    }
    if (conn != null) { try { conn.close();
    } catch (SQLException e) { e.printStackTrace();
    }
    }
}
}
}
}
}
}
}
}
}

```

## Config.properties

url=jdbc:mysql://localhost:3366/products  
userid=Rock  
password=aadi@123

## web.xml

```

<?xml version="1.0" encoding="UTF-8"?>
<web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://java.sun.com/xml/ns/javaee"
xsi:schemaLocation="http://java.sun.com/xml/ns/javaee
http://java.sun.com/xml/ns/javaee/web-app_2_5.xsd" id="WebApp_ID" version="2.5">
    <display-name>phase2project2</display-name>
    <welcome-file-list>
        <welcome-file>index.html</welcome-file>
        <welcome-file>index.jsp</welcome-file>
        <welcome-file>index.htm</welcome-file>
        <welcome-file>default.html</welcome-file>
        <welcome-file>default.jsp</welcome-file>
        <welcome-file>default.htm</welcome-file>
    </welcome-file-list>
    <servlet>
        <description></description>
        <display-name>ProductServlet</display-name>
        <servlet-name>ProductServlet</servlet-name>
        <servlet-class>phase2project.ProductServlet</servlet-class>
    </servlet>
    <servlet-mapping>
        <servlet-name>ProductServlet</servlet-name>
        <url-pattern>/ProductServlet</url-pattern>
    </servlet-mapping>
</web-app>

```

## **SQL QUERIES**

CREATE DATABASE products;

USE products;

CREATE TABLE Products (

id INT PRIMARY KEY,

name VARCHAR(100),

price DECIMAL(10, 2)

);

INSERT INTO Products (id, name, price) VALUES

(1, 'Product A', 8),

(2, 'Product B', 12.99),

(3, 'Product C', 10.99),

(4, 'Product D', 12.99),

(5, 'Product E', 11.99);