

Retrieving the Product Details Using the Product ID.

Project Details

Dynamic Web Project to illustrate validation of the User Login

Objective:

To Create a servlet-based application that shows a form to enter a product ID. The product ID is then validated, and product details are retrieved from the database and displayed to the user. We need to create a product table in MySQL and prepopulate it with data. Use JDBC to do all database processing.

Problem statement:

As a part of developing an e-commerce web application, the admin backend requires a module that can retrieve product information based on the product ID.

Requirements

- Create an HTML page to take in a product ID
- Set up JDBC to work with the application
- Create a servlet that will take the product ID and use JDBC to query the database for the product
- If the product is found, the servlet will display the product details, otherwise it will show an error message

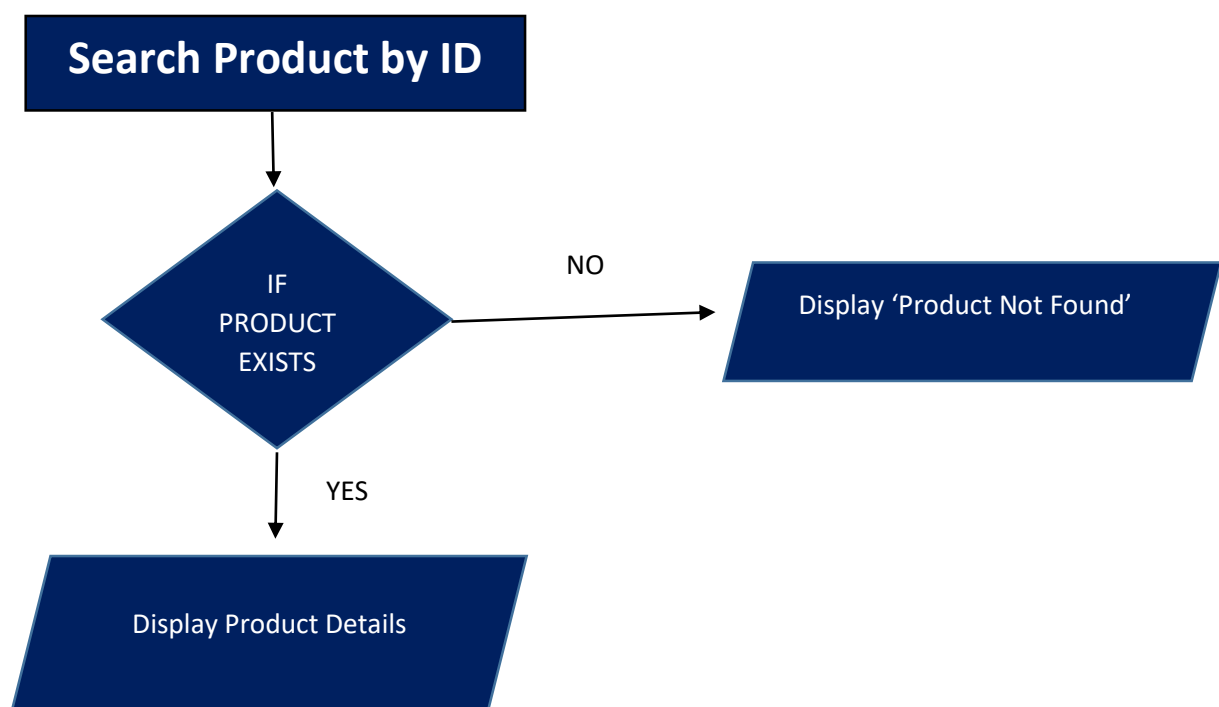
Product Backlog:

1. Creating a Product Search Page using HTML
2. Create a CSS file to format the product page.
3. Creating a database, Product Table and Insert value into It
4. Create a servlet to get requests and send responses to the Product Search Page.
5. Display Product Details , if product available else display appropriate message
6. Run and Test the application
7. Prepare documentation
8. Upload to GITHUB

Technologies and tools Used

- Servlet: to do the business logic and works a controller for the project.
- HTML: to design the pages.
- CSS: to format the contents.
- Eclipse: to write and run the code.
- Tomcat: to run and deploy servlet application.

Flowcharts of the Application



Core concepts used in the project.

- Object-Oriented: used to create and model objects for users and their credentials.
- HTML, CSS and JavaScript used to create pages
- Servlet is used to process request and provide response

How to run the program

- clone project
- Now run program on a server.
- Search Product Id

Github Link:

<https://github.com/bibhu-otz/FSD-COURSE-III-PRACTICE-PROJECTS/tree/main/LoginSystem>

Source Code :

index.html

```
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Product Details</title>
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.0/jquery.min.js"></script>
<link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztcQTWFspD3y
D65VohhpuuCOMLASjC" crossorigin="anonymous">
<style>
    body{
```



```
</div>
  <div class="container2 col-6">
    <table class="table table-hover"
id="results">

      </table>
</div>
<script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.
0.2/dist/js/bootstrap.bundle.min.js"
integrity="sha384-
MrcW6ZMFYlzcLA8NL+NtUVF0sA7MsXsP1UyJoMp4YLEuNS
fAP+JcXn/tWtIaxVXM"
crossorigin="anonymous"></script>
<script type="text/javascript">
  function getToResults() {

    var params = {'productId' :
document.getElementById("productId").value};
    alert(params.productId);
    $.ajax({
      type: 'POST',
      url: 'ProductDetails',
      data: params,
      async: false,
      success: function (result) {
        console.log(result);
```

```
document.getElementById('results').innerHTML=r
result;

document.getElementById('results').style="disp
lay:block";
    }
    });
}
</script>
</body>
</html>
```

ProductDetails.Java

```
import java.io.IOException;
import java.io.InputStream;
import java.io.PrintWriter;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.ResultSetMetaData;
import java.util.Properties;

import javax.servlet.RequestDispatcher;
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;


@WebServlet("/ProductDetails")

public class ProductDetails extends HttpServlet {

    private static final long serialVersionUID = 1L;


    public ProductDetails() {

        super();

    }


    protected void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {

        try {

            String id= request.getParameter("productId");

            System.out.println(id);

            response.setContentType("text/html");

            PrintWriter out = response.getWriter();
```

```
InputStream in = getServletContext().getResourceAsStream("/WEB-INF/config.properties");

Properties props = new Properties();

props.load(in);


DBConnection conn = new DBConnection(props.getProperty("url"),
props.getProperty("userid"), props.getProperty("password"));

String sql="SELECT * FROM products WHERE productId='"+id+"'";

PreparedStatement pstmt = conn.getConnection().prepareStatement(sql);

ResultSet rs = pstmt.executeQuery();


/* Printing column names */

ResultSetMetaData rsmd=rs.getMetaData();

int total=rsmd.getColumnCount();

out.print("<tr>");

for(int i=1;i<=total;i++)

{

out.print("<th scope='row'>"+rsmd.getColumnName(i)+"</th>");

}

out.print("</tr>");

/* Printing result */

while(rs.next())

{
```



```
out.print("<tr><td>" + rs.getString(1) + "</td><td>" + rs.getString(2) + "</td><td>" + rs.getString(3) + "</td></tr>");
```

```
}
```

```
out.print("</table>");
```

```
}catch(Exception e) {
```

```
    e.printStackTrace();
```

```
}
```

```
}
```

```
protected void doPost(HttpServletRequest request, HttpServletResponse response)  
throws ServletException, IOException {
```

```
    // TODO Auto-generated method stub
```

```
    doGet(request, response);
```

```
}
```

```
}
```

Screenshots:

