Programming Assignment 19 - Implementation of Opinion polling using Webservice

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Write web service **_Opinion_** to connect with the database to retrieve the opinion about any given product. Write a web service client to consume the **_Opinion_** service to get the opinion for the given product. Create a database product with the details of the product, namely, its id, name and the quality. The quality attribute can take the values of _Good_ or _Fair_. Populate the table with 20 records. Refer the following snapshot to design web service client.

CODE:

Opinionpollwebservice.java:

```java
package com.opinion;

import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import javax.jws.WebService;
import javax.jws.WebMethod;
import javax.jws.WebParam;

@WebService(serviceName = "OpinionPollWebSevice")
public class OpinionPollWebSevice {

  @WebMethod(operationName = "hello")
  public String hello(@WebParam(name = "name") String txt) {
    return "Hello " + txt + " !";
  }


  @WebMethod(operationName = "opinionaccess")
  public String opinionaccess(@WebParam(name = "name") String name) {
    try
    {
    Class.forName("com.mysql.jdbc.Driver");
    Connection con =
DriverManager.getConnection("jdbc:mysql://localhost:3306/user","root","vaishu");
    PreparedStatement ps = con.prepareStatement("select quality from product where name = ?");
    ps.setString(1, name);
```

```java
        ResultSet rs = ps.executeQuery();
        rs.next();
        String qual = rs.getString(1);
        String res = "The customer's opinion for the product "+name+" is "+qual;
        return res;
        }
        catch (Exception e)
        {
           System.out.println(e);
        }
        return null;
    }
}
```

Index.html:

```html
<!DOCTYPE html>
<html>
   <head>
      <title>Opinion Polling System</title>
      <meta charset="UTF-8">
      <meta name="viewport" content="width=device-width, initial-scale=1.0">
      <script>
function load()
{
  var v = document.getElementById("items").value;
var xhttp = new XMLHttpRequest();
xhttp.onreadystatechange = function()
{
if (this.readyState==4 && this.status==200)
{       document.getElementById("d1").innerHTML = this.responseText;}
};
var url="index.jsp?val="+v;
xhttp.open("GET",url,true);
xhttp.send();


}

</script>
   </head>
   <body>

      <h1 style="text-align:center">Opinion Polling System</h1>
      <br><br>
      <form style="text-align: center" action="index.jsp">
      <select name="items" id="items">
      <option value="Bournvita">Bournvita</option>
      <option value="Horlicks">Horlicks</option>
```

```html
<option value="Boost">Boost </option>
<option value="Complan"> Complan </option>

</select>
<br><br>
<button type="button" onclick="load()">Get Opinion</button>

</form>
<br><br>
<div id="d1" style="text-align: center"></div>
<br>
</body>
</html>
```

Index.jsp:

```jsp
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>
<!DOCTYPE html>
<html>
  <head>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
  </head>
  <body>

    <c:set var="n" value="${param.val}"/>

        <%-- start web service invocation --%>
  <%

  try {
      com.opinion.OpinionPollWebSevice_Service service = new
com.opinion.OpinionPollWebSevice_Service();
      com.opinion.OpinionPollWebSevice port = service.getOpinionPollWebSevicePort();
      java.lang.String name = (String)pageContext.getAttribute("n");
    System.out.println("Name is: "+name);
      // TODO process result here
      java.lang.String result = port.opinionaccess(name);
    System.out.println("Result is: "+result);
      out.println(result);
  } catch (Exception ex) {
      // TODO handle custom exceptions here
    out.println("ERROR");
  }

  %>
  <%-- end web service invocation --%>
```
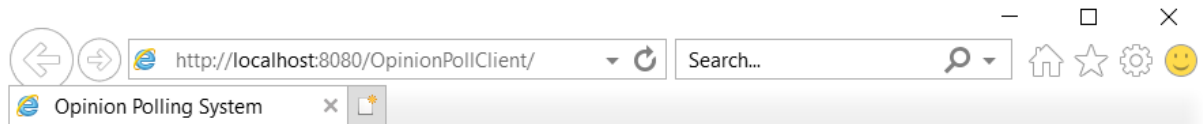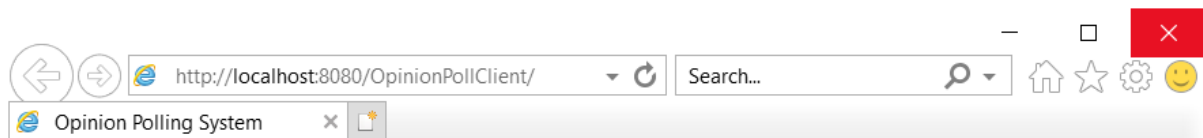
```
    </body>
</html>
```
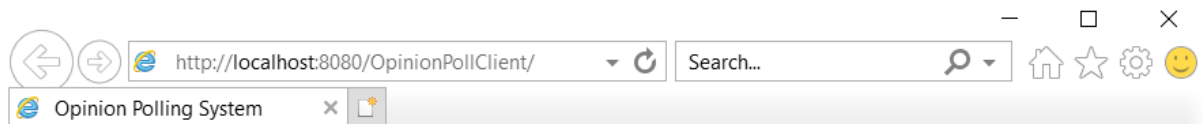
OUTPUT:

Opinion Polling System
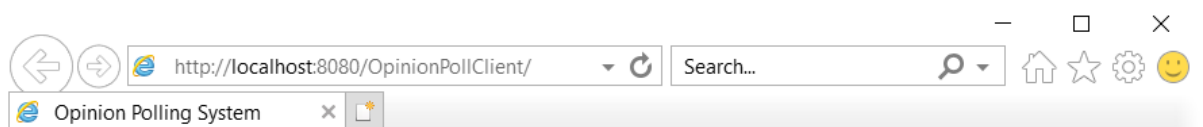
Bournvita
Horlicks
Boost
Complan

The customer's opinion for the product Bournvita is Good

Opinion Polling System

Boost ▽

Get Opinion

The customer's opinion for the product Boost is Fair

```
MySQL 5.5 Command Line Client                              —    □    ×

mysql> use user;
Database changed
mysql> insert into product values (1,'Bournvita','Good');
Query OK, 1 row affected (0.07 sec)

mysql> insert into product values(1,'Horlicks','Fair');
Query OK, 1 row affected (0.05 sec)

mysql> insert into product values(1,'Boost','Fair');
Query OK, 1 row affected (0.04 sec)

mysql> insert into product values(1,'Complan','Good');
Query OK, 1 row affected (0.04 sec)

mysql> select * from product;
+------+-----------+---------+
| id   | name      | quality |
+------+-----------+---------+
|    1 | Horlicks  | Fair    |
|    1 | Boost     | Fair    |
|    1 | Complan   | Good    |
|    1 | Bournvita | Good    |
|    1 | Bournvita | Good    |
|    1 | Horlicks  | Fair    |
|    1 | Boost     | Fair    |
|    1 | Complan   | Good    |
+------+-----------+---------+
8 rows in set (0.00 sec)

mysql>
```