

RESTAURENT BILLING SYSTEm USING ADVANCE JAVA TECHNOLOGY

Submitted by:

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Of

BACHELOR OF COMPUTER ENGINEERING

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INTRODUCTION

Among the favorite premises restaurant is a place where people visits usually. While visiting such place people expects service that should satisfy them however it is common thing that customer complains when he doesn't feel the service is proper. That is the reason why hospitality and service have great important as well as impact on business transaction.

Restaurant Billing System is made for restaurants, hotels, fast food corners etc. The Application is allows taking order from Java enabled device easily and makes order taking task easier.

There are many reasons due to which the feeling of dissatisfaction arises in customer's mind which include being entertained late in terms of order taking by the waiter and meals serving. The time taken by waiter for taking order is very long, customer gets disappointed. In other case due to human error the wrong order is taken by customer and served to consumer.

In the recent past, there has been evolution in ordering and serving system but still the results are not very much promising. With the advancement in information technology the issue of being late entertained can be solved.

The proposed java based menu card system has capacity to overcome time delays in traditional ordering system. Along with this it reduces the excess manpower need in restaurant business. As it is a gadget it doesn't need leave or vacation and thus work efficiently 24x7.

The application uses various features as follows:

- Place order easily from your Android device.
- Print bill on your printer on one click
- Make PDF copy of processed order
- Set remark, select payment method
- Waiter Information
- Backup of last 7 days data

With the increase in the number of restaurants and population of restaurant-goers, a need to enhance the working of hospitality industry is felt. This project work aims for this betterment of hospitality industry by incorporating technology. A recent survey on the utilization of technology in hospitality industries showcased that various applications based on mobile technologies are already in use enabling partial automation of the food ordering process. In this mini project, we designed and implemented digital dining in restaurants using advance java technology. This system is a basic dynamic database utility system. The tablet or any java enabled device at the customer table can store all the restaurant and menu details. This application is user-friendly, improves efficiency and accuracy for restaurants by saving time, reduces human errors and provides customer feedback. This system successfully overcomes the drawbacks in earlier

conventional food ordering systems and is less expensive as it requires a onetime investment for gadgets and installation of the application.

EXISTING SYSTEM:

The existing system is paper based. This system is used mostly in restaurants. In this, menu cards offered to customers in restaurant are made of Paper, hard board. Waiters use notepad to write the order of customers. The records are stored on paper.

The working approach of this system is simple. Every time customer visits restaurant, occupy his table and selects his menu from available menu on paper menu card. When waiter arrives, he notes down order of customer in his notepad.

As with anything paper based, it is so easy for things to get damaged by water due to mishandling, or paper being lost due to fire or accidents or just generally lost. There is wastage of time, money, and paper. As menu card is made up of paper, if restaurant management wants to update menu list or prices, it leads to wastage of paper and it will require reprinting of all the menu cards. Also, in many cases for small change to be made in menu card it is not convenient to print all menu cards again. Simply saying that menu card once printed can't be changed.

Moreover, after some days the menu card lost its worthy look. From the customer's point of view, this system is time consuming. As, one has to wait until the waiter comes to take the order, one has to call waiter number of times till he notices it, there can be misinterpretation while the waiter is writing your order on paper, and it might be possible that you are served with a wrong dish.

PROPOSED SYSTEM:

The above mentioned traditional menu ordering and catering systems are time consuming and susceptible to human errors which can be reduced but can't be avoided. The problem with the self-service ordering system is that self service restaurants are more popular in metro cities. So in smaller cities there are hardly any self service restaurants available. Many a times these self-service systems take unreasonable amount of delays to deliver the order. The problem with the recently developed ZigBee based system is its high cost and limited range.

Our aim is to develop a cost effective system which could work in small restaurants that are not willing to invest huge amount of money in these systems.

The newly suggested system is emphasized on increasing user friendly interface, simple navigation and low cost, increasing service range and decreasing order processing time.

PROJECT SCOPE:

With the increasing need of automation in every field it becomes necessary to offer customer with an advance experience with satisfaction in restaurants. In current formal dining environment, large number of restaurant offers static menu i.e. paper menu card to convey available food items and waiters delivers order to kitchen staff.

There is major scope in enhancing visual experience by replacing paper menu card with electronic menu card. To avoid delay in order, digital menu card and ordering system can be used to replace paper based system which manually deliver order to kitchen. Currently due to increased literacy, awareness of advance technology among people, they are crazy about latest technology and are eager to automate their routine tasks. So introducing new technology and approach in conventional food ordering system will lead to improved experience of customer.

IMPLEMENTATION:

Index.html:

Welcome to Digital Restaurant Jekil

User Name :

Password :

[Add Item](#)

```
<!DOCTYPE html>
```

```
<!--
```

To change this license header, choose License Headers in Project Properties.

To change this template file, choose Tools | Templates

and open the template in the editor.

```
-->
```

```
<html>
```

```
  <head>
```

```
    <title>User </title>
```

```
    <meta charset="UTF-8">
```

```
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
  </head>
```

```
  <body>
```

```
    <form method="POST" action="first_page">
```

```
      <div style="margin-top:200px;">
```

```
      <table border="0" align="center">
```

```
        <tr><th colspan="3" align="Left"><h2>Welcome to Digital Restaurant
```

```
Jekil</h2></th></tr>
```

```

        <tr>
            <td>User Name</td>
            <td>:</td>
            <td><input type="text" name="uname" ></td>
        </tr>
        <tr>
            <td>Password</td>
            <td>:</td>
            <td><input type="password" name="pass" ></td>
        </tr>
        <tr>
            <td><a href="insert_new_item">Add Item</a></td>
            <td></td>
            <td><input type="submit" name="submit" value="Submit"></td>
        </tr>
    </table>
</div>
</form>
</body>
</html>

```

First_page.java

```

import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.Date;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;

public class first_page extends HttpServlet {

    protected void processRequest(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");
        HttpSession session;
        String struname=request.getParameter("uname");

```

```

String strpass =request.getParameter("pass");
PrintWriter out = response.getWriter();
try
{
    session=request.getSession(true);
    if(session.getAttribute("user")!=null)
    {
        int b = Integer.parseInt(session.getAttribute("billno").toString());
        b++;
        session.setAttribute("billno", b);
        response.sendRedirect("MainWindow");
    }
    //Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
    //Connection cn=DriverManager.getConnection("jdbc:odbc:restaurant");
    Connection
cn=DriverManager.getConnection("jdbc:ucanaccess://D:\\test\\restaurant_management.accdb");
    Statement st=cn.createStatement();
    Statement st1=cn.createStatement();
    ResultSet rs=st.executeQuery("select * from users where username='"+struname+"' and
password='"+strpass+"'");
    ResultSet rs1=st1.executeQuery("SELECT bill_id FROM Bill ORDER BY bill_id");
    out.println("<!DOCTYPE html>");
    out.println("<html>");
    out.println("<head>");
    out.println("<title>User Detail</title>");
    out.println("</head>");
    out.println("<body>");
    out.println("<form method='POST' action='session'>");
    out.println("<div style=\"margin-top:200px;\"");
    if(rs.next())
    {
        // session=request.getSession(true);
        if(session.getAttribute("user")==null)
        {
            session.setAttribute("user",rs.getString(1));
            int bill_no=0;
            while(rs1.next())
            {
                bill_no = Integer.parseInt(rs1.getString("bill_id"));
            }
            bill_no = bill_no+2;
            session.setAttribute("billno", bill_no);
            response.sendRedirect("MainWindow");
        }
    }
    /*if(session.getAttribute("user")!=null || rs.next())

```

```

        {
            response.sendRedirect("MainWindow");
            out.println("<table align='center'>");
            out.println("<tr><td><font color='green'>Log In
Success</font></td><td></td></tr>");
            out.println("<tr> <td> <br>Welcome, "+session.getAttribute("user"));
            out.println("</tr> </td>");
            out.println("<tr> <td> </td> <td><input type='submit' name='submit'
value='LogOut'>");
        }*/
        else
        {
            out.println("<table align='center'>");
            out.println("<tr><td><font color='red'>Sorry, You have entered an invalid user
name or password</font></td></tr>");
            out.println("<tr><td><font color='red'><br>Please Try Again</font></td></tr>");
            out.println("</table>");
        }
        out.println("</div>");
        out.println("</body>");
        out.println("</html>");
    }
    catch (SQLException e) {
        out.println("Error Message for Database : "+e.toString());
    }
    catch (Exception d)
    {
        out.println("Message from server : "+d.toString());
    }
}

// <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign on the
left to edit the code.">
/**
 * Handles the HTTP <code>GET</code> method.
 *
 * @param request servlet request
 * @param response servlet response
 * @throws ServletException if a servlet-specific error occurs
 * @throws IOException if an I/O error occurs
 */
@Override
protected void doGet(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
    processRequest(request, response);
    HttpSession session = request.getSession(true);
    Date createTime = new Date(session.getCreationTime());

```

```

    }

    /**
     * Handles the HTTP <code>POST</code> method.
     *
     * @param request servlet request
     * @param response servlet response
     * @throws ServletException if a servlet-specific error occurs
     * @throws IOException if an I/O error occurs
     */
    @Override
    protected void doPost(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        processRequest(request, response);
    }

    /**
     * Returns a short description of the servlet.
     *
     * @return a String containing servlet description
     */
    @Override
    public String getServletInfo() {
        return "Short description";
    } // </editor-fold>
}

```

MainWindow.java

```

/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */

import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.Date;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
import java.text.DateFormat;
import java.text.SimpleDateFormat;

```



```

import java.util.Calendar;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;

/**
 *
 * @author jekil
 */
public class MainWindow extends HttpServlet {

    /**
     * Processes requests for both HTTP <code>GET</code> and <code>POST</code>
     * methods.
     *
     * @param request servlet request
     * @param response servlet response
     * @throws ServletException if a servlet-specific error occurs
     * @throws IOException if an I/O error occurs
     * @throws java.sql.SQLException
     */
    protected void processRequest(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException{
        response.setContentType("text/html;charset=UTF-8");
        PrintWriter out = response.getWriter();
        DateFormat dateFormat = new SimpleDateFormat("dd/MM/yyyy");
        Calendar cal = Calendar.getInstance();
        HttpSession session=request.getSession(true);
        try {
            /* TODO output your page here. You may use following sample code. */
            Connection
cn=DriverManager.getConnection("jdbc:ucanaccess://D:\\test\\restaurant_management.accdb");
            Statement st=cn.createStatement();
            ResultSet rs=st.executeQuery("select * from item_category");

            out.println("<!DOCTYPE html PUBLIC '-//W3C//DTD XHTML 1.0 Transitional//EN'
'http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd'>\n" +
            "<html xmlns='http://www.w3.org/1999/xhtml' lang='en' xml:lang='en'>\n" +
            "<head>\n" +
            "<title>Welcome</title>\n" +
            "<meta http-equiv='Content-type' content='text/html; charset=UTF-8' />\n" +
            "<style type='text/css' media='all'>\n" +
            "@import 'style.css';\n" +

```

```

"</style>\n" +
"</head>\n" +
"<body>\n" +
"<form method='post' action='sub_menu'>"+
"<div id='navcontainer'>\n" +
"  <ul>\n" +
"    <li><a href='first_page'>Home</a></li>\n" +
"    <li><a href='about_us'>About Us</a></li>\n" +
"    <li><a href='contact_us'>Contact Us</a></li>\n" +
"    <li><a href='insert_new_item'>Add New Item</a></li>\n" +
"  </ul>\n" +
"</div>\n" +
"<div id='horizon'>\n" +
"  <div id='content'>\n" +
"    <div id='maincontainer'>\n" +
"      <div id='contentwrapper'>\n" +
"        <div id='contentcolumn'>\n" +
"          <div id='text'>");
out.println("<h4><center>Welcome to our Restaurant</center></h4>");
out.println("<h4>Bill No : "+session.getAttribute("billno").toString()+"</h4>");
out.println("<table><tr><td></td><td>Date :
"+dateFormat.format(cal.getTime())+"</td></tr>");
    out.println("<tr><td><b>Select Table Number : </b></td><td><select
name='table'><option value=1>1</option> <option value=2>2</option> <option
value=3>3</option> <option value=4>4</option> </select></td></tr>");
    int i=0;
    out.println("<tr><td colspan='2'><center><b>MENU</b></center></td></tr>");
    while(rs.next())
    {
        i++;
        if(i%2==0)
            out.println("<td><input type='submit' name='items'
value='"+rs.getString(3)+"'</td></tr>");
        else
            out.println("<tr><td><input type='submit' name='items'
value='"+rs.getString(3)+"'</td>");

    }
    out.println("</table>");
    out.println("</form>");
    out.println("</div>\n" +
"  <div id='copyright'> &copy; Jekil Hansora (130073107005)<br> &copy; Kuldeep
Gadhavi (130073107003)</div>\n" +
"    </div>\n" +
"  </div>\n" +
"    <div id='leftcolumn'>\n" +

```

```

"    <div id='navleft'>                <br><br>\n" +
"        <h3>Z Restaurant</h3>\n" +
"        <ul>\n" +
"            <b>Gujarati<br>\n" +
"            Punjabi<br>\n" +
"            Chineese<br>\n" +
"            Italian<br>\n" +
"            Maxican<br></b>\n" +
"        </ul>\n" +
"    </div>\n" +
"    <div id='notesleft'><h3><b> Z Restaurant</h3>Near B-Cube Hotel, <br> Price Society,
<br> Bhuj-370001 <br> Gujarat </b></div>\n" +
"    </div>\n" +
" </div>\n" +
" </div>\n" +
"</body>\n" +
"</html>");

```

```

    }
    catch(SQLException ed )
    {
        out.println(ed.toString());
    }
    finally {
        out.close();
    }
}

```

// <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign on the left to edit the code.">

```

/**
 * Handles the HTTP <code>GET</code> method.
 *
 * @param request servlet request
 * @param response servlet response
 * @throws ServletException if a servlet-specific error occurs
 * @throws IOException if an I/O error occurs
 */
@Override
protected void doGet(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
    processRequest(request, response);
}

/**
 * Handles the HTTP <code>POST</code> method.

```

```

*
* @param request servlet request
* @param response servlet response
* @throws ServletException if a servlet-specific error occurs
* @throws IOException if an I/O error occurs
*/
@Override
protected void doPost(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
    processRequest(request, response);
}

/**
 * Returns a short description of the servlet.
 *
 * @return a String containing servlet description
 */
@Override
public String getServletInfo() {
    return "Short description";
} // </editor-fold>

}

```

Sub_menu.java

```

/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */

import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;

/**
 *

```

```

* @author jekil
*/
public class sub_menu extends HttpServlet {

    /**
     * Processes requests for both HTTP <code>GET</code> and <code>POST</code>
     * methods.
     *
     * @param request servlet request
     * @param response servlet response
     * @throws ServletException if a servlet-specific error occurs
     * @throws IOException if an I/O error occurs
     */
    protected void processRequest(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");
        int table_no = Integer.parseInt(request.getParameter("table"));
        HttpSession session=request.getSession(true);
        String type_name=request.getParameter("items");
        PrintWriter out = response.getWriter();
        try {
            /* TODO output your page here. You may use following sample code. */
            Connection
cn=DriverManager.getConnection("jdbc:ucanaccess://D:\\test\\restaurant_management.accdb");
            Statement st=cn.createStatement();
            ResultSet rs=st.executeQuery("select
item_id,item_name,items.item_type_id,item_price,item_category.item_type_name from
items,item_category where items.item_type_id=item_category.item_type_id and
item_category.item_type_name='"+type_name+"'");
            //ResultSet rs=st.executeQuery("select * from item_category where
item_type_name='"+type_name+"'");
            //ResultSet rs=st.executeQuery("select * from items ");

            out.println("<!DOCTYPE html PUBLIC '-//W3C//DTD XHTML 1.0 Transitional//EN'
'http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd'>\n" +
                "<html xmlns='http://www.w3.org/1999/xhtml' lang='en' xml:lang='en'>\n" +
                "<head>\n" +
                "<title>"+type_name+" ( Table - "+table_no+" )</title>\n" +
                "<meta http-equiv='Content-type' content='text/html; charset=UTF-8' />\n" +
                "<style type='text/css' media='all'>\n" +
                "@import 'style.css';\n" +
                "</style>\n" +
                "</head>\n" +
                "<body>\n" +
                "<div id='navcontainer'>\n" +

```

```

" <ul>\n" +
" <li><a href='first_page'>Home</a></li>\n" +
" <li><a href='about_us'>About Us</a></li>\n" +
" <li><a href='contact_us'>Contact Us</a></li>\n" +
" </ul>\n" +
"</div>\n" +
"<div id='horizon'>\n" +
" <div id='content'>\n" +
" <div id='maincontainer'>\n" +
" <div id='contentwrapper'>\n" +
" <div id='contentcolumn'>\n" +
" <div id='text'>");
out.println("<h4><center>Welcome to our Restaurant<br>" + type_name + " ( Table - "
"+table_no+ " )</center></h4>");
out.println("<table>");
int i=1;
while(rs.next())
{
    out.println("<form method='get' action='insert_item_order'>");
    out.println("<tr><td>" + rs.getString("item_id") + "</td>");
    out.println("<td>" + rs.getString(2) + "<td>");
    //out.println("<td><input type='checkbox' name='item_id'
value="" + rs.getString(1) + "></td>");
    out.println("<td><select name='qty'><option value=0>Qty</option><option
value=1>1</option> <option value=2>2</option> <option value=3>3</option> <option
value=4>4</option> </select></td>");
    out.println("<td><input type='text' name='Comment' size='5' placeholder='Comment'>
</td>");
    out.println("<input type='hidden' name='id_item'
value="" + rs.getString("item_id") + ">");
    out.println("<input type='hidden' name='table_no' value="" + table_no + ">");
    out.println("<input type='hidden' name='items' value="" + type_name + ">");
    out.println("<td><input type='submit' name='add' value='Add'></td></tr>");
    out.println("</form>");

}
out.println("<form method='get' action='insert_item_order'>");
out.println("<input type='hidden' name='table_no' value="" + table_no + ">");
out.println("<tr><tr><tr><td colspan='3'><input type='submit' name='add' value='Main
Menu'> </td>");
out.println("<td colspan='3'><input type='submit' name='add' value='Order Summary'
</td></tr>");
out.println("</form>");

out.println("</table>");
out.println("</div>\n" +

```

```

"      <div id='copyright'> &copy; Jekil Hansora (130073107005)<br> &copy; Kuldeep
Gadhavi (130073107003)</div>\n" +
"      </div>\n" +
"      </div>\n" +
"      <div id='leftcolumn'>\n" +
"          <div id='navleft'>                <br><br>\n" +
"              <h3>Z Restaurant</h3>\n" +
"              <ul>\n" +
"                  <b>Gujarati<br>\n" +
"                  Punjabi<br>\n" +
"                  Chineese<br>\n" +
"                  Italian<br>\n" +
"                  Maxican<br></b>\n" +
"              </ul>\n" +
"          </div>\n" +
"          <div id='notesleft'><h3><b> Z Restaurant</h3>Near B-Cube Hotel, <br> Price Society,
<br> Bhuj-370001 <br> Gujarat </b></div>\n" +
"      </div>\n" +
"      </div>\n" +
"      </div>\n" +
"      </div>\n" +
"</body>\n" +
"</html>");

```

```

    }
    catch(SQLException ed)
    {
        out.println(ed.toString());
    }
    catch(Exception e)
    {
        out.println(e.getMessage()+e.toString()+"jekil");
    }
    finally {
        out.close();
    }
}

```

// <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign on the left to edit the code.">

```

/**
 * Handles the HTTP <code>GET</code> method.
 *
 * @param request servlet request
 * @param response servlet response
 * @throws ServletException if a servlet-specific error occurs
 * @throws IOException if an I/O error occurs

```

```

    */
    @Override
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        processRequest(request, response);
    }

    /**
     * Handles the HTTP <code>POST</code> method.
     *
     * @param request servlet request
     * @param response servlet response
     * @throws ServletException if a servlet-specific error occurs
     * @throws IOException if an I/O error occurs
     */
    @Override
    protected void doPost(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        processRequest(request, response);
    }

    /**
     * Returns a short description of the servlet.
     *
     * @return a String containing servlet description
     */
    @Override
    public String getServletInfo() {
        return "Short description";
    } // </editor-fold>
}

```

Insert_item_order.java

```

/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */

import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.SQLException;

```



```

import java.sql.Statement;
import java.text.DateFormat;
import java.text.SimpleDateFormat;
import java.util.Calendar;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;

/**
 *
 * @author jekil
 */
public class insert_item_order extends HttpServlet {

    /**
     * Processes requests for both HTTP <code>GET</code> and <code>POST</code>
     * methods.
     *
     * @param request servlet request
     * @param response servlet response
     * @throws ServletException if a servlet-specific error occurs
     * @throws IOException if an I/O error occurs
     */
    protected void processRequest(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");
        PrintWriter out = response.getWriter();
        DateFormat dateFormat = new SimpleDateFormat("dd/MM/yyyy");
        Calendar cal = Calendar.getInstance();
        HttpSession session=request.getSession(true);
        //int item_id_final = Integer.parseInt(request.getParameter("itemid"));
        String btn = request.getParameter("add");
        String table_id = request.getParameter("table_no");

        if(btn.equals("Add"))
        {
            try {

                int billno = Integer.parseInt(session.getAttribute("billno").toString());
                //String billno = session.getAttribute("billno").toString();
                int item_id = Integer.parseInt(request.getParameter("id_item"));
                //String item_id = request.getParameter("id_item");
                int qty = Integer.parseInt(request.getParameter("qty"));
                String items = request.getParameter("items");
            }
        }
    }
}

```

```

String comment = request.getParameter("Comment");

    out.println("<!DOCTYPE html>");
    out.println("<html>");
    out.println("<head>");
    out.println("<title>Servlet insert_item_order</title>");
    out.println("</head>");
    out.println("<body>");
    out.println("Bill no : "+billno+" Qty : "+qty+" Item_id : "+item_id+" Comment : 
"+comment);
        Connection
cn=DriverManager.getConnection("jdbc:ucanaccess://D:\\test\\restaurant_management.accdb");
        Statement st=cn.createStatement();
        ResultSet rs=st.executeQuery("select item_price from items where item_id = "+item_id);
        rs.next();
        out.println("Price : "+(Double.parseDouble(rs.getString("item_price")) * qty));
        double total = Double.parseDouble(rs.getString("item_price")) * qty;
        out.println("Total Value is : "+total);
        int result = st.executeUpdate("insert into Bill
(`bill_id`,`table_no`,`item_id`,`Comment`,`item_qty`,`date`,`total_bill_pitem`) values
('"+billno+"','"+table_id+"','"+item_id+"','"+comment+"','"+qty+"','"+dateFormat.format(cal.getTi
me())+"','"+total+"");
        out.println("Result Value : "+result);
        out.println("jekil hansora : "+table_id+" : "+items);
        if(result>0)
            response.sendRedirect("sub_menu?table="+table_id+"&items="+items);
//        out.println("<tr><td></td><td>"+dateFormat.format(cal.getTime())+"</td></tr>");

        /* TODO output your page here. You may use following sample code. */
        out.println("</body>");
        out.println("</html>");
    }
    catch(SQLException ed )
    {
        out.println(ed.toString()+"\n"+ed.getMessage()+"\n"+ed.getSQLState());
    }
    catch(Exception s)
    {
        out.println(s.toString()+s.getMessage());
    }
    finally {
        out.close();
    }
}
else if(btn.equals("Main Menu"))
{

```

```

        response.sendRedirect("MainWindow");
    }
    else if(btn.equals("Order Summary"))
    {
        response.sendRedirect("order_summary?table="+table_id);
    }
}

```

// <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign on the left to edit the code.">

```

/**
 * Handles the HTTP <code>GET</code> method.
 *
 * @param request servlet request
 * @param response servlet response
 * @throws ServletException if a servlet-specific error occurs
 * @throws IOException if an I/O error occurs
 */
@Override
protected void doGet(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
    processRequest(request, response);
}

/**
 * Handles the HTTP <code>POST</code> method.
 *
 * @param request servlet request
 * @param response servlet response
 * @throws ServletException if a servlet-specific error occurs
 * @throws IOException if an I/O error occurs
 */
@Override
protected void doPost(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
    processRequest(request, response);
}

/**
 * Returns a short description of the servlet.
 *
 * @return a String containing servlet description
 */
@Override
public String getServletInfo() {
    return "Short description";
}

```

```
}// </editor-fold>
```

```
}
```

Order_summary.java

```
/*
```

```
 * To change this license header, choose License Headers in Project Properties.
```

```
 * To change this template file, choose Tools | Templates
```

```
 * and open the template in the editor.
```

```
*/
```

```
import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;
```

```
/**
```

```
 *
```

```
 * @author jekil
```

```
*/
```

```
public class order_summary extends HttpServlet {
```

```
    /**
```

```
     * Processes requests for both HTTP <code>GET</code> and <code>POST</code>
```

```
     * methods.
```

```
     *
```

```
     * @param request servlet request
```

```
     * @param response servlet response
```

```
     * @throws ServletException if a servlet-specific error occurs
```

```
     * @throws IOException if an I/O error occurs
```

```
     */
```

```
    protected void processRequest(HttpServletRequest request, HttpServletResponse response)
```

```
        throws ServletException, IOException {
```

```
        response.setContentType("text/html;charset=UTF-8");
```

```
        HttpSession session=request.getSession(true);
```

```
        String bill_no = session.getAttribute("billno").toString();
```

```
        String table_id = request.getParameter("table");
```

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

```

try {
    /* TODO output your page here. You may use following sample code. */
    Connection
cn=DriverManager.getConnection("jdbc:ucanaccess://D:\\test\\restaurant_management.accdb");
    Statement st=cn.createStatement();
    ResultSet rs=st.executeQuery("select item_name,item_qty,item_id from items,bill where
bill.item_id=items.item_id and bill.bill_id="+bill_no);

    out.println("<!DOCTYPE html PUBLIC '-//W3C//DTD XHTML 1.0 Transitional//EN'
'http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd'>\n" +
        "<html xmlns='http://www.w3.org/1999/xhtml' lang='en' xml:lang='en'>\n" +
        "<head>\n" +
        "<title>(Table-"+table_id+")</title>\n" +
        "<meta http-equiv='Content-type' content='text/html; charset=UTF-8' />\n" +
        "<style type='text/css' media='all'>\n" +
        "@import 'style.css';\n" +
        "</style>\n" +
        "</head>\n" +
        "<body>\n" +
        "<div id='navcontainer'>\n" +
        "    <ul>\n" +
        "        <li><a href='first_page'>Home</a></li>\n" +
        "        <li><a href='about_us'>About Us</a></li>\n" +
        "        <li><a href='contact_us'>Contact Us</a></li>\n" +
        "    </ul>\n" +
        "</div>\n" +
        "<div id='horizon'>\n" +
        "    <div id='content'>\n" +
        "        <div id='maincontainer'>\n" +
        "            <div id='contentwrapper'>\n" +
        "                <div id='contentcolumn'>\n" +
        "                    <div id='text'>");
    out.println("<h4><center>Welcome to our Restaurant<br>Order Summary<br>( Table -
"+table_id+" )</center></h4>");

    out.println("<table>");
    out.println("<center><tr><td colspan='2'><b>Bill No : "+bill_no+" </b></td>");
    out.println("<td colspan='4'><b>Table No : "+table_id+" </b></td></tr>");
    out.println("</center><tr><th>Sr<br>No.</th><th>Items</th><th>
colspan='1'>Quantity</th></tr>");
    int i;
    i=1;
    while(rs.next())
    {
        out.println("<form action='delete_item' method='get'>");
        out.println("<input type='hidden' name='table_no' value='"+table_id+">");
    }
}

```

```

        out.println("<input type='hidden' name='id_item'
value='"+rs.getString("item_id")+"'>");
        out.println("<input type='hidden' name='item_qty'
value='"+rs.getString("item_qty")+"'>");
        //out.println("<input type='hidden' name='bill_no' value='"+bill_no+"'>");
        out.println("<tr><td>" + i + "</td>");
        out.println("<td>" + rs.getString("item_name") + "</td>");
        out.println("<td colspan='2'>");
        out.println("<input type='submit' name='operation' value='+'>
"+rs.getString("item_qty")+" <input type='submit' name='operation' value='- '>");
        //out.println("</td>");
        out.println("<input type='submit' name='operation' value='x'></td></tr>");
        out.println("</form>");
        i++;
    }
    out.println("<form action='delete_item' method='get'>");
    out.println("<tr> <td colspan='3'><input type='submit' name='operation' value='Main
Menu'></td>");
    out.println("<td colspan='3'><input type='submit' name='operation' value='Place
Order'></td> </tr>");
    out.println("</form>");
    out.println("</table>");

    out.println("</div>\n" +
"    <div id='copyright'> &copy; Jekil Hansora (130073107005)<br> &copy; Kuldeep
Gadhavi (130073107003)</div>\n" +
"    </div>\n" +
"    </div>\n" +
"    <div id='leftcolumn'>\n" +
"        <div id='navleft'>                <br><br>\n" +
"            <h3>Z Restaurant</h3>\n" +
"            <ul>\n" +
"                <b>Gujarati<br>\n" +
"                Punjabi<br>\n" +
"                Chineese<br>\n" +
"                Italian<br>\n" +
"                Maxican<br></b>\n" +
"            </ul>\n" +
"        </div>\n" +
"        <div id='notesleft'><h3><b> Z Restaurant</h3>Near B-Cube Hotel, <br> Price Society,
<br> Bhuj-370001 <br> Gujarat </b></div>\n" +
"    </div>\n" +
"    </div>\n" +
"    </div>\n" +
"</div>\n" +
"</body>\n" +

```

```

"</html>");
    } catch(SQLException ed )
    {
        out.println(ed.toString()+"\n"+ed.getMessage()+"\n"+ed.getSQLState());
    }
    finally {
        out.close();
    }
}

```

// <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign on the left to edit the code.">

/**

* Handles the HTTP <code>GET</code> method.

*

* @param request servlet request

* @param response servlet response

* @throws ServletException if a servlet-specific error occurs

* @throws IOException if an I/O error occurs

*/

@Override

protected void doGet(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

processRequest(request, response);

}

/**

* Handles the HTTP <code>POST</code> method.

*

* @param request servlet request

* @param response servlet response

* @throws ServletException if a servlet-specific error occurs

* @throws IOException if an I/O error occurs

*/

@Override

protected void doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

processRequest(request, response);

}

/**

* Returns a short description of the servlet.

*

* @return a String containing servlet description

*/

@Override

```
    public String getServletInfo() {  
        return "Short description";  
    } // </editor-fold>  
}
```

Add_new_item.java

```
/*  
 * To change this license header, choose License Headers in Project Properties.  
 * To change this template file, choose Tools | Templates  
 * and open the template in the editor.  
 */  
  
import java.io.IOException;  
import java.io.PrintWriter;  
import javax.servlet.ServletException;  
import javax.servlet.http.HttpServlet;  
import javax.servlet.http.HttpServletRequest;  
import javax.servlet.http.HttpServletResponse;  
  
/**  
 *  
 * @author jekil  
 */  
public class add_new_item extends HttpServlet {  
  
    /**  
     * Processes requests for both HTTP <code>GET</code> and <code>POST</code>  
     * methods.  
     *  
     * @param request servlet request  
     * @param response servlet response  
     * @throws ServletException if a servlet-specific error occurs  
     * @throws IOException if an I/O error occurs  
     */  
    protected void processRequest(HttpServletRequest request, HttpServletResponse response)  
        throws ServletException, IOException {  
        response.setContentType("text/html;charset=UTF-8");  
        PrintWriter out = response.getWriter();  
        try {  
            /* TODO output your page here. You may use following sample code. */  
            out.println("<!DOCTYPE html>");  
            out.println("<html>");  
            out.println("<head>");  
            out.println("<title>Servlet add_new_item</title>");  
            out.println("</head>");  
            out.println("<body>");
```



```

        out.println("<h1>Servlet add_new_item "+ request.getParameter("itemid") +"at " +
request.getContextPath() + "</h1>");
        out.println("</body>");
        out.println("</html>");
    } finally {
        out.close();
    }
}

```

// <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign on the left to edit the code.">

/**

* Handles the HTTP <code>GET</code> method.

*

* @param request servlet request

* @param response servlet response

* @throws ServletException if a servlet-specific error occurs

* @throws IOException if an I/O error occurs

*/

@Override

protected void doGet(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

processRequest(request, response);

}

/**

* Handles the HTTP <code>POST</code> method.

*

* @param request servlet request

* @param response servlet response

* @throws ServletException if a servlet-specific error occurs

* @throws IOException if an I/O error occurs

*/

@Override

protected void doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

processRequest(request, response);

}

/**

* Returns a short description of the servlet.

*

* @return a String containing servlet description

*/

@Override

```
public String getServletInfo() {  
    return "Short description";  
} // </editor-fold>
```

```
}
```

Delete_item.java

```
/*
```

```
 * To change this license header, choose License Headers in Project Properties.
```

```
 * To change this template file, choose Tools | Templates
```

```
 * and open the template in the editor.
```

```
*/
```

```
import java.io.IOException;  
import java.io.PrintWriter;  
import java.sql.Connection;  
import java.sql.DriverManager;  
import java.sql.ResultSet;  
import java.sql.SQLException;  
import java.sql.Statement;  
import javax.servlet.ServletException;  
import javax.servlet.http.HttpServlet;  
import javax.servlet.http.HttpServletRequest;  
import javax.servlet.http.HttpServletResponse;  
import javax.servlet.http.HttpSession;
```

```
/**
```

```
 *
```

```
 * @author jekil
```

```
*/
```

```
public class delete_item extends HttpServlet {
```

```
    /**
```

```
     * Processes requests for both HTTP <code>GET</code> and <code>POST</code>  
     * methods.
```

```
     *
```

```
     * @param request servlet request
```

```
     * @param response servlet response
```

```
     * @throws ServletException if a servlet-specific error occurs
```

```
     * @throws IOException if an I/O error occurs
```

```
     */
```

```
    protected void processRequest(HttpServletRequest request, HttpServletResponse response)  
        throws ServletException, IOException {  
        response.setContentType("text/html;charset=UTF-8");  
        HttpSession session=request.getSession(true);
```

```

PrintWriter out = response.getWriter();
try {
    /* TODO output your page here. You may use following sample code. */
    String button = request.getParameter("operation");
    if(button.equals("Main Menu"))
    {
        response.sendRedirect("MainWindow");
    }
    else if(button.equals("Place Order"))
    {
        response.sendRedirect("order_placed");
    }
    else
    {
        int billno = Integer.parseInt(session.getAttribute("billno").toString());
        int item_id = Integer.parseInt(request.getParameter("id_item"));
        int item_qty = Integer.parseInt(request.getParameter("item_qty"));
        String table_id = request.getParameter("table_no");
        out.println("<!DOCTYPE html>");
        out.println("<html>");
        out.println("<head>");
        out.println("<title>Order_summary (Table No. "+table_id+"</title>");
        out.println("</head>");
        out.println("<body>");
        Connection
cn=DriverManager.getConnection("jdbc:ucanaccess://D:\\test\\restaurant_management.accdb");
        Statement st=cn.createStatement();
        Statement st1=cn.createStatement();
        ResultSet rs = st1.executeQuery("select item_price from items where item_id =
"+item_id);
        rs.next();
        int price = Integer.parseInt(rs.getString("item_price"));
        out.println("Price JEkil : "+price);
        int result;
        result = 0;
        if(item_qty==1 && button.equals("-"))
        {
            button = "x";
        }
        if(button.equals("x"))
        {
            result = st.executeUpdate("Delete from Bill where bill_id="+billno+" and
item_qty="+item_qty+" and table_no="+table_id+" and item_id="+item_id);
        }
        else if(button.equals("+") || button.equals("%2B"))
        {

```

```

        int total_price = price * (item_qty+1);
        result = st.executeUpdate("update Bill set item_qty="+ (item_qty+1) + " ,
total_bill_pitem="+total_price+" where bill_id="+billno+" and table_no="+table_id+" and
item_id="+item_id+" and item_qty="+item_qty);
    }
    else if(button.equals("-"))
    {
        int total_price= price * (item_qty-1);
        result = st.executeUpdate("update Bill set item_qty="+ (item_qty-1) + " ,
total_bill_pitem="+total_price+" where bill_id="+billno+" and table_no="+table_id+" and
item_id="+item_id+" and item_qty="+item_qty);
    }
    if(result>0)
        response.sendRedirect("order_summary?table="+table_id);
    out.println("Hello</body></html>");
}
}
catch(NumberFormatException e)
{
    out.println(e.getMessage());
} catch (SQLException e) {
    out.println(e.getMessage());
} catch (IOException e) {
    out.println(e.getMessage());
}
finally {
    out.close();
}
}

```

// <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign on the left to edit the code.">

/**

* Handles the HTTP <code>GET</code> method.

*

* @param request servlet request

* @param response servlet response

* @throws ServletException if a servlet-specific error occurs

* @throws IOException if an I/O error occurs

*/

@Override

protected void doGet(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

processRequest(request, response);

}

```

/**
 * Handles the HTTP <code>POST</code> method.
 *
 * @param request servlet request
 * @param response servlet response
 * @throws ServletException if a servlet-specific error occurs
 * @throws IOException if an I/O error occurs
 */
@Override
protected void doPost(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
    processRequest(request, response);
}

/**
 * Returns a short description of the servlet.
 *
 * @return a String containing servlet description
 */
@Override
public String getServletInfo() {
    return "Short description";
} // </editor-fold>
}

```

SCREENSHOT:


LOGIN:



Welcome to the new World of Restaurant

User Name	:	<input type="text"/>
Password	:	<input type="password"/>
Add Item		<input type="button" value="Submit"/>

ORDER_SUMMARY:



Z Restaurant
Gujarati
Punjabi
Chinese
Italian
Mexican

Near B-Cube Hotel,
Price Society,
Bhuj-370001
Gujarat

Welcome to our Restaurant
Order Summary
(Table - 1)


Bill No : 11 Table No : 1

Sr No.	Items	Quantity
1	Tomato Soup	+ 1 - X
2	Hot n Sure Soup	+ 2 - X
3	Kaju Masala	+ 3 - X
4	Venilla	+ 6 - X
5	Fix thali	+ 2 - X

Main Menu Place Order

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BILL



Z Restaurant
Gujarati
Punjabi
Chinese
Italian
Mexican

Near B-Cube Hotel,
Price Society,
Bhuj-370001
Gujarat

Z Restaurant


Bill No - 11

Date : 14/10/2015

Sr. No	Item Name	Qty	Price	Total
1	Tomato Soup	1	50	50
2	Hot n Sure Soup	2	55	110
3	Kaju Masala	3	129	387
4	Venilla	6	25	150
5	Fix thali	2	120	240
Total				937
Service Tax(8%)			74	
Grand Total				1011

Thank you For Visiting

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© Kuldeep Gadhavi (130073107003)



BBD Offers on Home & Large Appliances

Round 2 of BBD has begun. Heavy Offers on Large Appliances, TVs, Furniture, Kitchen & Dining and Cookwares.

ADD_NEW_ITEM

http://localhost:8080/restaurant_management/insert_item

Add Item

Welcome

Home About Us Contact Us

Z Restaurant

Gujarati
Punjabi
Chinese
Italian
Mexican

Z Restaurant

Near B-Cube Hotel,
Price Society,
Bhuj-370001
Gujarat

Welcome to our Restaurant
Add New Items

Enter Item Name :

Select Item Type:

Item Price :

Item Description :

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CONCLUSION:

Such kind of systems can prove worthy in transforming the whole catering industry. The proposed system will help in reducing the number of staffs used in the restaurants hence will help in considerably reducing cost of restaurant management. It will also minimize manual service given by waiters and serving staff, thus eliminating the human mistakes. It can also help in reducing child labor problem, which is a huge problem in countries like India.