|  |
| --- |
| **M S RAMAIAH INSTITUTE OF TECHNOLOGY**  **(Autonomous Institute Affiliated to VTU)**  **Department of Information Science and Engineering** |
| https://lh6.googleusercontent.com/LTywIt5pr2MnOeBx2D2TbPglev-Ts7H3ccZWiEZ14HZf0EWB1OjCTfj3smESo_ZXeSRctXNpIYBAOHF4HknBsQWZDdEARKrQIrQRXUOZAUGW_17HykkZ-bcnE9XFS_7ueDz8qC67 |
| A Project on |
| **“FITNESS APP”** |
| *Submitted in partial fulfillment of the CIE for the subject*  *Java and J2EE Lab*  **(IS624L)** |
| by |
| **Rupesh Kumar Pandey** |
| **(1MS15IS142)** |
|  |
| *Under the guidance*  *of* |
| **Koushik S** |
| Assistant Professor |
| Department of ISE, MSRIT |
| Bengaluru-560054 |

**PROBLEM STATEMENT (AIM OF THE PROJECT)**

1. Enter the details of food and exercise consumed and based on the calorie intake it calculates the health rate.
2. Calories are preferred on the database.
3. Categories of exercise to reduce calories.
4. Sitting hours which increases the calorie intake.

|  |  |  |
| --- | --- | --- |
|  |  |  |

**IMPLEMENTATION DETAILS AND CODE SNIPPETS**

1. We’ve used mysql database to create a user database.
2. The database will be given with the folder
3. Used three java classes and five jsp files

Methods and classes

Food.java-

Food.java is basically to used add food which the user has consumed. It then adds the calorie count accordingly.

@WebServlet("/Food")

public class Food extends HttpServlet {

private static final long serialVersionUID = 1L;

static Connection getConn() throws Exception {

String driver = "com.mysql.jdbc.Driver";

String url = "jdbc:mysql://localhost/food";

String username = "root";

String password = "pass";

Class.forName(driver);

Connection conn = DriverManager.getConnection(url, username, password);

return conn;

}

public Food() { super();

}

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

}

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

String formName = request.getParameter("form-name");

String query="";

System.out.println(formName);

try {

Connection conn = getConn();

int findex =Integer.parseInt(request.getParameter("foodindex"));

String fname = request.getParameter("fname");

int fcal = Integer.parseInt(request.getParameter("fcal"));

System.out.println(findex+"Yolo");

if(formName.equals("breakfast")){

query = "insert into userbreakfast(bid,bname,cal) Values("+findex+",'"+fname+"',"+fcal+")";

else if(formName.equals("lunch")){

query = "insert into userlunch(lid,lname,cal) Values("+findex+",'"+fname+"',"+fcal+")";

}

else if(formName.equals("dinner")){

query = "insert into userdinner(did,dname,cal) Values("+findex+",'"+fname+"',"+fcal+")";

}

Statement stmt = conn.createStatement();

stmt.executeUpdate(query);

response.sendRedirect("addFood.jsp");

}

catch (com.mysql.jdbc.exceptions.jdbc4.MySQLIntegrityConstraintViolationException e){

response.sendRedirect("addFood.jsp");

}

catch (Exception e) {

e.printStackTrace();

}}}

**DelFood.java**

This class basically deletes the foods that the user is consumed and updates the database and the calorie count.

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

String formName = request.getParameter("form-name");

String query="";

System.out.println(formName);

try {

Connection conn = getConn();

int findex =Integer.parseInt(request.getParameter("foodindex"));

System.out.println(findex+"Yolo");

if(formName.equals("breakfast")){

query = "delete from userbreakfast where bid="+findex+"";

}

else if(formName.equals("lunch")){

query = "delete from userlunch where lid="+findex+"";

}

else if(formName.equals("dinner")){

query = "delete from userdinner where did="+findex+"";

}

Statement stmt = conn.createStatement();

stmt.executeUpdate(query);

response.sendRedirect("Main.jsp");

}

catch (com.mysql.jdbc.exceptions.jdbc4.MySQLIntegrityConstraintViolationException e){

response.sendRedirect("Main.jsp");

}

catch (Exception e) {

e.printStackTrace();

}

**Exercise.java**

This includes all the exercises we have added to decrease the calorie count.

It has running ,cycling ,gymnastics and bodybuilding.

try {

Connection conn = getConn();

int RunningTime = Math.abs(Integer.parseInt(request.getParameter("Running")));

int CyclingTime = Math.abs(Integer.parseInt(request.getParameter("Cycling")));

int BodyBuildingTime = Math.abs(Integer.parseInt(request.getParameter("Body Building")));

int GymnasticsTime = Math.abs(Integer.parseInt(request.getParameter("Gymnastics")));

Statement statement = conn.createStatement();

statement.executeUpdate("Update exercise set time="+RunningTime+" where ename='Running'");

statement.executeUpdate("Update exercise set time="+CyclingTime+" where ename='Cycling'");

statement.executeUpdate("Update exercise set time="+BodyBuildingTime+" where ename='Body Building'");

statement.executeUpdate("Update exercise set time="+GymnasticsTime+" where ename='Gymnastics'");

response.sendRedirect("Main.jsp");

}

catch (com.mysql.jdbc.exceptions.jdbc4.MySQLIntegrityConstraintViolationException e){

response.sendRedirect("Main.jsp");

}

catch (Exception e) {

// TODO Auto-generated catch block

response.sendRedirect("Main.jsp");

e.printStackTrace();

}

We have used five jsp files, two of which are really important

**Main.jsp**

<%@ page import="java.util.HashMap"%>

<%@ page import="java.util.\*"%>

<%@ include file="header.jsp" %>

<%@ page import="java.util.ArrayList" %>

<%@ page import="java.sql.\*" %>

<% try{

Class.forName("com.mysql.jdbc.Driver");

Connection connection = DriverManager.getConnection("jdbc:mysql://localhost:3306/food", "root","faiz");

Statement statement = connection.createStatement();

%>

<div class="container">

<div class="row">

<div class="col-sm-4 col-sm-offset-2">

<h2>Today's Food</h2>

<div class="alert alert-warning" role="alert"><h3>Total Food Calories - <%

int temp;

ResultSet totalQuery = statement.executeQuery("select \* from userbreakfast");

long count =0;

HashMap hm = new HashMap();

hm.put("Nihal","CoolGuy");

Set s =hm.entrySet();

Iterator itr = s.iterator();

while(itr.hasNext()){

Map.Entry ent = (Map.Entry)itr.next();

}

ArrayList<Integer> userBreakfastArray = new ArrayList<Integer>();

ArrayList<Integer> userLunchArray = new ArrayList<Integer>();

ArrayList<Integer> userDinnerArray = new ArrayList<Integer>();

while(totalQuery.next()){

count = count + Integer.parseInt(totalQuery.getString(3));

temp = Integer.parseInt(totalQuery.getString(1));

userBreakfastArray.add(temp);

}

totalQuery = statement.executeQuery("select \* from userlunch");

while(totalQuery.next()){

count = count + Integer.parseInt(totalQuery.getString(3));

temp = Integer.parseInt(totalQuery.getString(1));

userLunchArray.add(temp);

}

totalQuery = statement.executeQuery("select \* from userdinner");

while(totalQuery.next()){

count = count + Integer.parseInt(totalQuery.getString(3));

temp = Integer.parseInt(totalQuery.getString(1));

userDinnerArray.add(temp);

}

out.print(count);

%></h3></div>

<h3>Breakfast</h3>

<%

ResultSet resultset =

statement.executeQuery("select \* from userbreakfast");

out.println();

if(!resultset.next()) {

out.println("No Breakfast Added ");

} else {

//out.println("oloY");

%>

<table class="table">

<tr><th>Name</th><th>Calories</th><th>Remove</th></tr>

<%

do{

%>

<tr>

<td><%= resultset.getString(2) %></td>

<td><%= resultset.getString(3) %></td>

<td>

<form action="DelFood" method="post">

<input type="hidden" name="form-name" value="breakfast">

<input type="hidden" name="foodindex" value="<%= resultset.getString(1) %>">

<input class="btn btn-danger" type="submit" name="breakfast" value="Delete">

</form>

</td>

</tr>

<%

}while(resultset.next());

%>

</table>

<%

}

%>

<h3>Lunch</h3>

<%

ResultSet lunchResult = statement.executeQuery("select \* from userlunch");

if(!lunchResult.next()){

out.println("No Lunch Menu");

}

else {

%>

<table class="table">

<tr><th>Name</th><th>Calories</th><th>Remove</th></tr>

<%

do{

%>

<tr>

<td><%= lunchResult.getString(2) %></td>

<td><%= lunchResult.getString(3) %></td>

<td>

<form action="DelFood" method="post">

<input type="hidden" name="form-name" value="lunch">

<input type="hidden" name="foodindex" value="<%= lunchResult.getString(1) %>">

<input class="btn btn-danger" type="submit" name="lunch" value="Delete">

</form>

</td>

</tr>

<%

}while(lunchResult.next());

%>

</table>

<% } %>

<h3>Dinner</h3>

<%

ResultSet dinnerResult = statement.executeQuery("select \* from userdinner");

if(!dinnerResult.next()){

out.println("No Dinner Menu");

}

else {

%>

<table class="table">

<tr><th>Name</th><th>Calories</th><th>Remove</th></tr>

<%

do{

%>

<tr>

<td><%= dinnerResult.getString(2) %></td>

<td><%= dinnerResult.getString(3) %></td>

<td>

<form action="DelFood" method="post">

<input type="hidden" name="form-name" value="dinner">

<input type="hidden" name="foodindex" value="<%= dinnerResult.getString(1) %>">

<input class="btn btn-danger" type="submit" name="dinner" value="Delete">

</form>

</td>

</tr>

<%

}while(dinnerResult.next());

%>

</table>

<%

}

%>

<a href="addFood.jsp" class="btn btn-block btn-warning">Add Food</a>

</div>

<div class="col-sm-4">

<h2>Today's Exercises </h2>

<form method="post" action="Exercise">

<%

ResultSet rb = statement.executeQuery("select \* from exercise");

int ecount = 0;

while(rb.next()){

if(rb.getString(2).equals("Running")){

ecount = ecount + Integer.parseInt(rb.getString(3))\*8;

}

if(rb.getString(2).equals("Cycling")){

ecount = ecount + Integer.parseInt(rb.getString(3))\*5;

}

if(rb.getString(2).equals("Body Building")){

ecount = ecount + Integer.parseInt(rb.getString(3))\*8;

}

if(rb.getString(2).equals("Gymnastics")){

ecount = ecount + Integer.parseInt(rb.getString(3))\*6;

}

}

%>

<div class="alert alert-warning" role="alert"><h3>Total Exercise Calories - <% out.println(ecount); %></h3>

</div>

<%

ResultSet rs = statement.executeQuery("select \* from exercise");

//out.println("oloY");

while(rs.next()){

%>

<div class="form-group">

<label><%= rs.getString(2) %></label>

<input type="text" name="<%= rs.getString(2) %>" value="<%= rs.getString(3) %>">

</div>

<%

}

%>

<label>Sitting <span style="color:red;">(won't change the calories)</span></label>

<input type="text" name="Sitting" value="0">

<input type="submit" class="btn btn-block btn-success" value="Update">

</form>

<div class="alert alert-success" role="alert">

<p>Calorie Count :</p> <h1><% out.print(count - ecount); %></h1>

</div>

<%

}

catch(Exception e ){

e.printStackTrace();

}

%>

</div>

</div>

<div class="row">

</div>

</div>

**addFood.jsp**

<%@page import="java.util.Iterator"%>

<%@ include file="header.jsp" %>

<%@ page import="java.util.ArrayList" %>

<%@ page import="java.sql.\*" %>

<% try{

Class.forName("com.mysql.jdbc.Driver");

Connection connection = DriverManager.getConnection(

"jdbc:mysql://localhost:3306/food", "root", "faiz");

Statement statement = connection.createStatement();

int temp;

boolean presentInUser=false;

Iterator<Integer> itr;

%>

<div class="container">

<div class="row">

<div class="col-sm-6 col-sm-offset-3">

<div class="alert alert-warning" role="alert"><h3>Total Food Calories - <%

ResultSet totalQuery = statement.executeQuery("select \* from userbreakfast");

long count =0;

ArrayList<Integer> userBreakfastArray = new ArrayList<Integer>();

ArrayList<Integer> userLunchArray = new ArrayList<Integer>();

ArrayList<Integer> userDinnerArray = new ArrayList<Integer>();

while(totalQuery.next()){

count = count + Integer.parseInt(totalQuery.getString(3));

temp = Integer.parseInt(totalQuery.getString(1));

userBreakfastArray.add(temp);

}

totalQuery = statement.executeQuery("select \* from userlunch");

while(totalQuery.next()){

count = count + Integer.parseInt(totalQuery.getString(3));

temp = Integer.parseInt(totalQuery.getString(1));

userLunchArray.add(temp);

}

totalQuery = statement.executeQuery("select \* from userdinner");

while(totalQuery.next()){

count = count + Integer.parseInt(totalQuery.getString(3));

temp = Integer.parseInt(totalQuery.getString(1));

userDinnerArray.add(temp);

}

out.print(count);

%></h3></div>

<a href="Main.jsp" class="btn btn-pull-right">Go back to Main Page</a>

</div>

<div class="col-sm-6 col-sm-offset-3">

<h3>Breakfast</h3>

<%

ResultSet resultset =

statement.executeQuery("select \* from breakfast");

if(!resultset.next()) {

out.println("SORRY, WE COULD NOT GET YOUR INFORMATIONS. ");

} else {

%>

<table class="table">

<tr><th>Name</th><th>Calories</th><th>Add/Remove</th></tr>

<%

while(resultset.next())

{

temp= Integer.parseInt(resultset.getString(1));

presentInUser=false;

itr = userBreakfastArray.iterator();

while(itr.hasNext()){

System.out.println("testing");

if(itr.next() == temp){

presentInUser=true;

break;

}

}

%>

<tr>

<td><%= resultset.getString(2) %></td>

<td><%= resultset.getString(3) %></td>

<%

if(!presentInUser){

%>

<form action="Food" method="post">

<td>

<input type="hidden" name="fname" value="<%= resultset.getString(2) %>">

<input type="hidden" name="fcal" value="<%= resultset.getString(3) %>">

<input type="hidden" name="form-name" value="breakfast">

<input type="hidden" name="foodindex" value="<%= resultset.getString(1) %>">

<input class="btn btn-success" type="submit" name="breakfast" value="Add">

</td>

</form>

<%

}

else {

%>

<td>

<input class="btn btn-default" type="submit" name="dinner" value="Added" disabled="disabled">

</td>

<%

}

%>

</tr>

<%

}

}

%>

</table>

<h3>Lunch</h3>

<table class="table">

<tr><th>Name</th><th>Calories</th><th>Add/Remove</th></tr>

<%

ResultSet lunchResult = statement.executeQuery("select \* from lunch");

if(!lunchResult.next()){

out.println("No Lunch Menu");

}

else {

while(lunchResult.next()){

temp= Integer.parseInt(lunchResult.getString(1));

presentInUser=false;

itr = userLunchArray.iterator();

while(itr.hasNext()){

System.out.println();

if(itr.next() == temp){

presentInUser=true;

break;

}

}

%>

<tr>

<td><%= lunchResult.getString(2) %></td>

<td><%= lunchResult.getString(3) %></td>

<%

if(!presentInUser){

%>

<form action="Food" method="post">

<td>

<input type="hidden" name="fname" value="<%= lunchResult.getString(2) %>">

<input type="hidden" name="fcal" value="<%= lunchResult.getString(3) %>">

<input type="hidden" name="form-name" value="lunch">

<input type="hidden" name="foodindex" value="<%= lunchResult.getString(1) %>">

<input class="btn btn-success" type="submit" name="lunch" value="Add"></td>

</form>

<%

}

else {

%>

<td>

<input class="btn btn-default" type="submit" name="dinner" value="Added" disabled="disabled">

</td>

<%

}

%>

</tr>

<%

}

}

%>

</table>

<h3>Dinner</h3>

<table class="table">

<tr><th>Name</th><th>Calories</th><th>Add/Remove</th></tr>

<%

ResultSet dinnerResult = statement.executeQuery("select \* from dinner");

if(!dinnerResult.next()){

out.println("No Dinner Menu");

}

else {

//ResultSet userDinner = statement.executeQuery("select \* from userdinner");

while(dinnerResult.next()){

%>

<tr>

<td><%= dinnerResult.getString(2) %></td>

<td><%= dinnerResult.getString(3) %></td>

<%

temp= Integer.parseInt(dinnerResult.getString(1));

presentInUser=false;

itr = userDinnerArray.iterator();

while(itr.hasNext()){

System.out.println("testing");

if(itr.next() == temp){

presentInUser=true;

break;

}

}

/\* while(userDinner.next())

{

if(dinnerResult.getString(1) == userDinner.getString(1))

{

presentInUser = true;

break;

}

} \*/

if(!presentInUser)

{

%>

<form action="Food" method="post">

<td>

<input type="hidden" name="fname" value="<%= dinnerResult.getString(2) %>">

<input type="hidden" name="fcal" value="<%= dinnerResult.getString(3) %>">

<input type="hidden" name="form-name" value="dinner">

<input type="hidden" name="foodindex" value="<%= dinnerResult.getString(1) %>">

<input class="btn btn-success" type="submit" name="dinner" value="Add">

</td>

</form>

<%

}

else {

%>

<td>

<input class="btn btn-default" type="submit" name="dinner" value="Added" disabled="disabled">

</td>

<%

%>

</tr>

<%

}

}

}

}

catch (Exception e){

e.printStackTrace();

}

%>

</table>

</div>

</div>

</div>

**Output Screenshots**



