



DATABASE SYSTEM AND APPLICATIONS

MINI PROJECT

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REG.NO: 2018505554

DEPT: ELECTRONICS AND INSTRUMENTATION

SUB CODE: CS7594

TOPIC: DIETARY ASSESSMENT AND ANALYSIS

DIETARY ASSESSMENT AND ANALYSIS

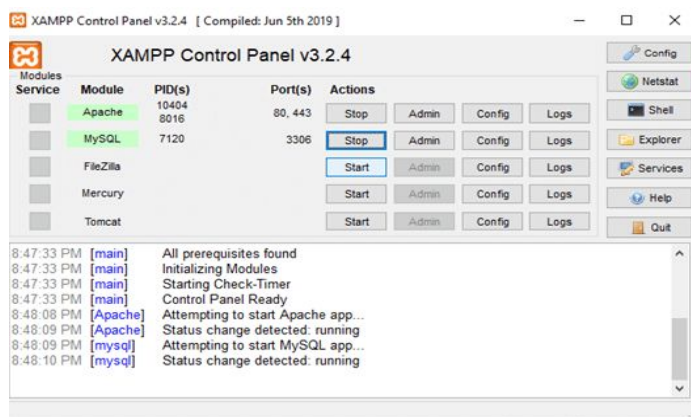
OBJECTIVE:

To create frontend (Form creation) and backend (database) .

To connect your application form with the database and implement it with validation using php with mySQL.

Creating MySQL Database:

1. This is done by using phpMyAdmin.
2. Navigate to XAMPP in your system. The Control Panel is now visible.



3. Now click on the "Admin" button corresponding to the MySQL module. This automatically redirects the user to a web browser to the following address- <http://localhost/phpmyadmin>

4. Click on the "Database" tab. Here you can see the Create option. Choose an appropriate name for the input field titled Database name.

5. In the created Database (Login page in this case), click on the 'Create Table' option. Fill the input fields titled "Name" and "Number of Columns" and hit the 'Go' button.

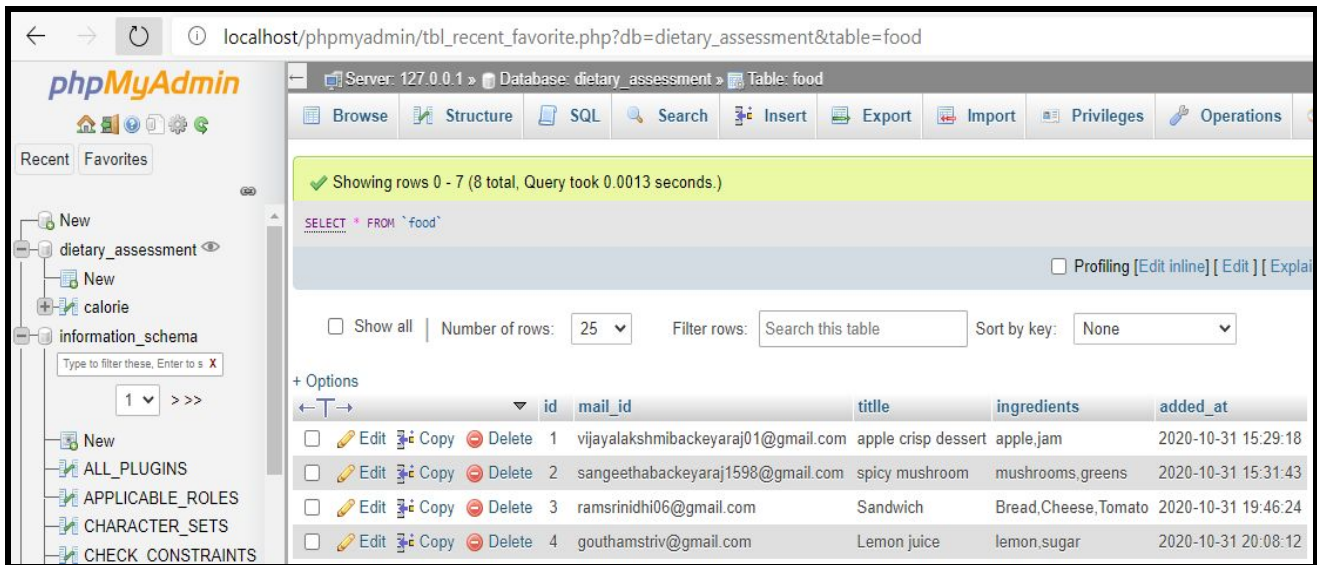
6. Enter the names for each of your columns, select the type, and the maximum length allowed for the input field. Click on "Save" in the bottom right corner.

Creating form using php:

1. Use the XAMPP Control Panel to start the Apache server and click on Admin.
2. This automatically redirects the user to a web browser to the following address- <http://localhost/dashboard/>
3. Create your Webpage files into the destination folder. Default folder is c:/xampp/htdocs.

Database Created using mySQL:

- Food:



Server: 127.0.0.1 » Database: dietary_assessment » Table: food

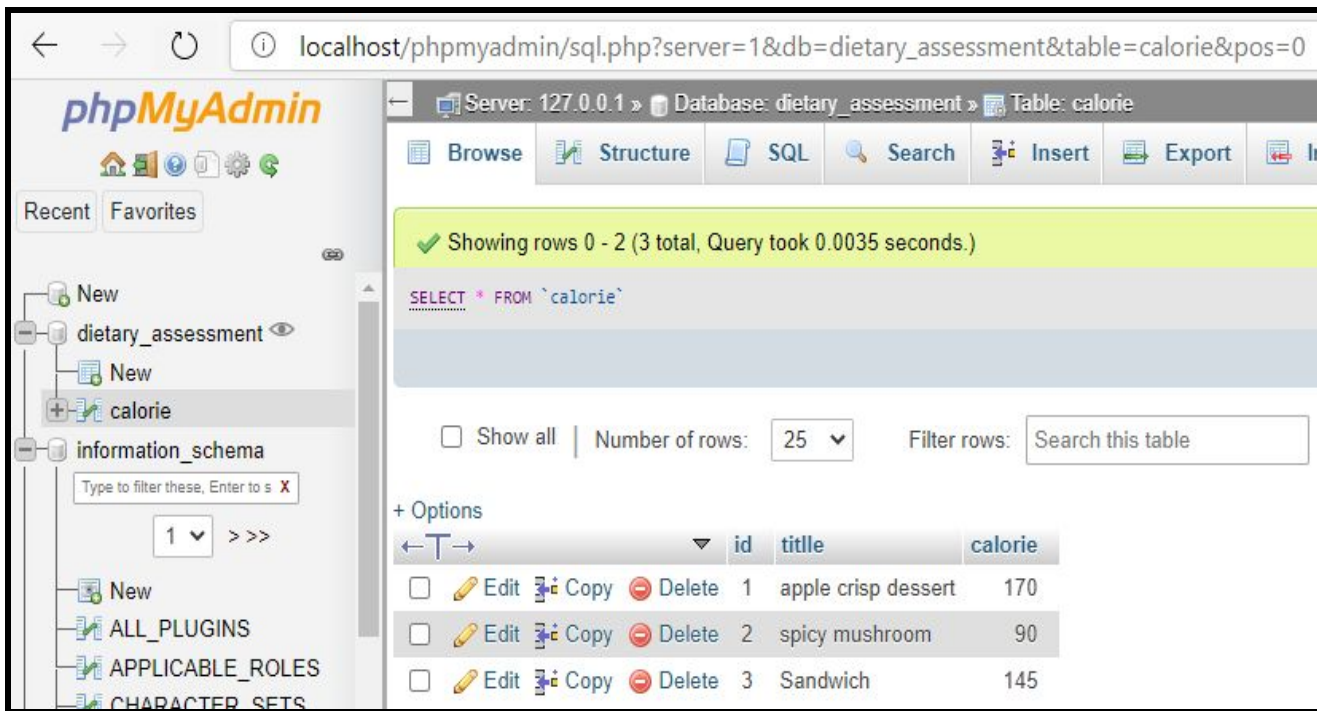
Showing rows 0 - 7 (8 total, Query took 0.0013 seconds.)

`SELECT * FROM `food``

Number of rows: 25 Filter rows: Search this table Sort by key: None

	id	mail_id	title	ingredients	added_at
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	1	vijayalakshmiabackeyaraj01@gmail.com	apple crisp dessert	apple,jam	2020-10-31 15:29:18
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	2	sangeethabackeyaraj1598@gmail.com	spicy mushroom	mushrooms,greens	2020-10-31 15:31:43
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	3	ramsrinidhi06@gmail.com	Sandwich	Bread,Cheese, Tomato	2020-10-31 19:46:24
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	4	gouthamstriv@gmail.com	Lemon juice	lemon,sugar	2020-10-31 20:08:12

- Calorie:



Server: 127.0.0.1 » Database: dietary_assessment » Table: calorie

Showing rows 0 - 2 (3 total, Query took 0.0035 seconds.)

`SELECT * FROM `calorie``

Number of rows: 25 Filter rows: Search this table

	id	title	calorie
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	1	apple crisp dessert	170
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	2	spicy mushroom	90
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	3	Sandwich	145

Files created for website:

This PC > Local Disk (C:) > xampp > htdocs > dietaryassessment				
Name	Date modified	Type	Size	
add.php	31-10-2020 21:28	PHP File	3 KB	
calorie.php	31-10-2020 21:42	PHP File	1 KB	
db_connect.php	31-10-2020 19:40	PHP File	1 KB	
footer.php	31-10-2020 16:35	PHP File	1 KB	
header.php	31-10-2020 22:09	PHP File	1 KB	
index.php	31-10-2020 21:55	PHP File	2 KB	

Programs:

index.php:

```
1 <?php
2
3 include('db_connect.php');
4
5 if(isset($_POST['submit'])){
6 // Attempt select query execution
7 $sql = "SELECT * FROM food";
8 if($result = mysqli_query($link, $sql)){
9     if(mysqli_num_rows($result) > 0){
10         echo "<table>";
11         echo "<tr>";
12             echo "<th>id</th>";
13
14             echo "<th>title</th>";
15             echo "<th>ingredients</th>";
16         echo "</tr>";
17         while($row = mysqli_fetch_array($result)){
18             echo "<tr>";
19                 echo "<td>" . $row['id'] . "</td>";
20
21                 echo "<td>" . $row['title'] . "</td>";
22                 echo "<td>" . $row['ingredients'] . "</td>";
23             echo "</tr>";
24         }
25         echo "</table>";
26         // Free result set
27         mysqli_free_result($result);
28     } else{
29         echo "No records matching your query were found.";
30     }
31 } else{
32     echo "ERROR: Could not able to execute $sql. " . mysqli_error($link);
33 }
34 }
35 // Close connection
```

Activate W
Go to Settings


```

36  mysqli_close($link);
37  ?>
38
39  <!DOCTYPE html>
40  <html>
41
42      <?php include('header.php'); ?>
43
44      <?php include('footer.php'); ?>
45
46  </html>

```

header.php:

```

1  <head>
2      <title>Dietary Assessment</title>
3      <!-- Compiled and minified CSS -->
4      <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/materialize/1.0.0/css/materialize.min.css">
5      <style type="text/css">
6          .brand{
7              background: #1d5b6b !important;
8          }
9          .brand-text{
10             color: #6b1d5b !important;
11         }
12         form{
13             max-width: 460px;
14             margin: 20px auto;
15             padding: 20px;
16         }
17     </style>
18 </head>
19 <body class="blue lighten-5">
20     <nav class="white z-depth-0">
21         <div class="container">
22             <a href="index.php" class="brand-logo brand-text">DIETARY ASSESSMENT</a>
23             <ul id="nav-mobile" class="right hide-on-small-and-down">
24                 <li><a href="add.php" class="btn brand z-depth-0">Add food to know the Calories</a></li>
25             </ul>
26         </div>
27     </nav>

```

db_connect.php:

```

1  <?php
2
3  $link = mysqli_connect("localhost", "Viji", "Viji2001@bms", "dietary_assessment");
4
5  if($link === false){
6      die("ERROR: Could not connect. " . mysqli_connect_error());
7  }
8
9  ?>

```

calorie.php:

```

1  <?php
2
3      echo "Your request is being processed. This may take few minutes. We will get back to you with the calorie value!"
4
5  ?>

```

add.php:

```
1  <?php
2
3  include('db_connect.php');
4  $email = $title = $ingredients = '';
5  $errors = array('email' => '', 'title' => '', 'ingredients' => '');
6
7  if(isset($_POST['submit'])){
8
9      // check email
10     if(empty($_POST['email'])){
11         $errors['email'] = 'An email is required';
12     } else{
13         $email = $_POST['email'];
14         if(!filter_var($email, FILTER_VALIDATE_EMAIL)){
15             $errors['email'] = 'Email must be a valid email address';
16         }
17     }
18
19     // check title
20     if(empty($_POST['title'])){
21         $errors['title'] = 'A title is required';
22     } else{
23         $title = $_POST['title'];
24         if(!preg_match('/^[a-zA-Z\s]+$/i', $title)){
25             $errors['title'] = 'Title must be letters and spaces only';
26         }
27     }
28
29     // check ingredients
30     if(empty($_POST['ingredients'])){
31         $errors['ingredients'] = 'At least one ingredient is required';
32     } else{
33         $ingredients = $_POST['ingredients'];
34         if(!preg_match('/^([a-zA-Z\s]+)(,[a-zA-Z\s]*)*$/i', $ingredients)){
35             $errors['ingredients'] = 'Ingredients must be a comma separated list';
36         }
37     }
38
39     if(array_filter($errors)){
40         //echo 'errors in form';
41     } else {
42         //echo 'form is valid';
43         // escape sql chars
44         $email = mysqli_real_escape_string($link, $_POST['email']);
45         $title = mysqli_real_escape_string($link, $_POST['title']);
46         $ingredients = mysqli_real_escape_string($link, $_POST['ingredients']);
47
48         // create sql
49         $sql = "INSERT INTO food(title,mail_id,ingredients) VALUES('$title','$email','$ingredients')";
50
51         // save to db and check
52         if(mysqli_query($link, $sql)){
53             //success
54             header('Location: http://localhost/dietaryassessment/index.php');
55         } else{
56             //error
57             echo 'query error: '. mysqli_error($link);
58         }
59     }
60 }
```

```

61     } // end POST check
62
63
64     ?>
65
66     <!DOCTYPE html>
67     <html>
68
69         <?php include('header.php'); ?>
70
71         <section class="container grey-text">
72             <h4 class="center">Add food to know the Calories</h4>
73             <form class="white" action="add.php" method="POST">
74                 <label>Your Email</label>
75                 <input type="text" name="email" value="<?php echo htmlspecialchars($email) ?>">
76                 <div class="red-text"><?php echo $errors['email']; ?></div>
77                 <label>Food Title</label>
78                 <input type="text" name="title" value="<?php echo htmlspecialchars($title) ?>">
79                 <div class="red-text"><?php echo $errors['title']; ?></div>
80                 <label>Ingredients (comma separated)</label>
81                 <input type="text" name="ingredients" value="<?php echo htmlspecialchars($ingredients) ?>">
82                 <div class="red-text"><?php echo $errors['ingredients']; ?></div>
83                 <div class="center">
84                     <ul id="nav-mobile" class="right hide-on-small-and-down">
85                         <li><a href="calorie.php" class="btn brand z-depth-0">Get Calorie Info</a></li>
86                     </ul>
87                 </div>
88             </form>
89         </section>
90
91         <?php include('footer.php'); ?>

```

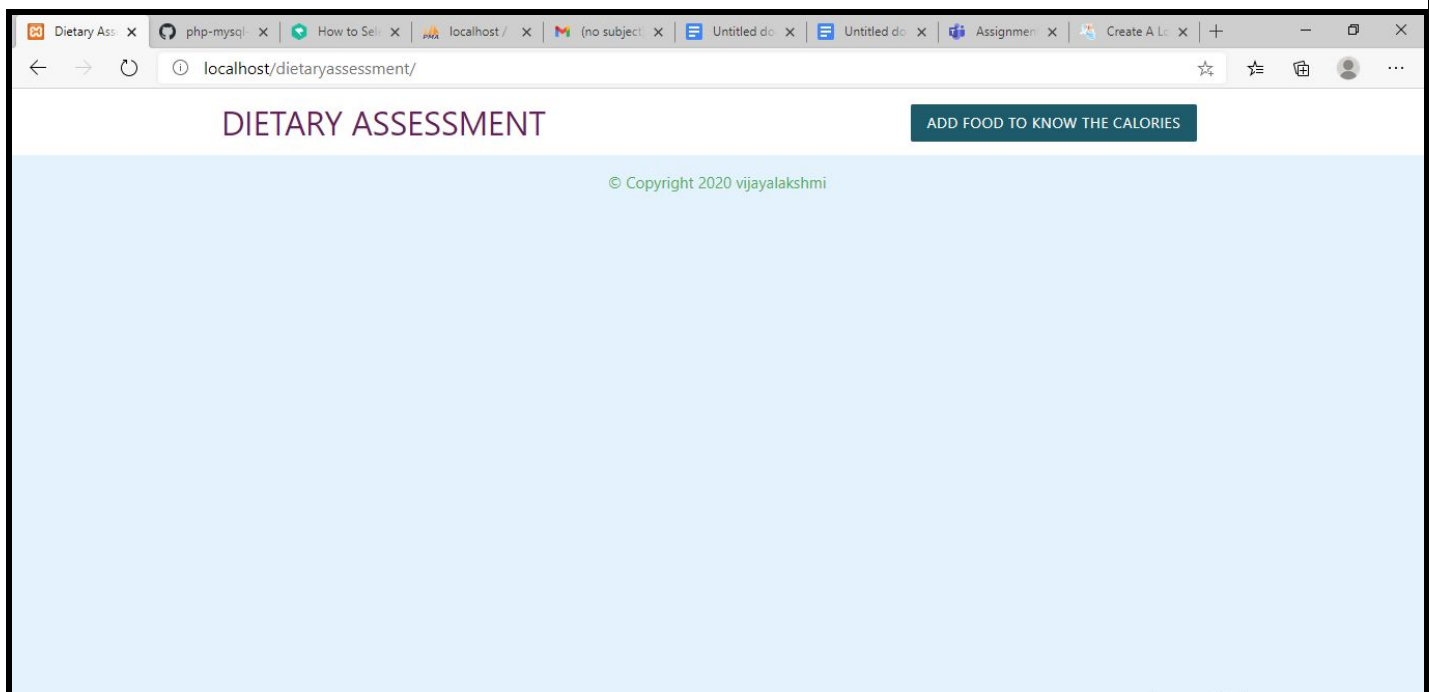
footer.php:

```

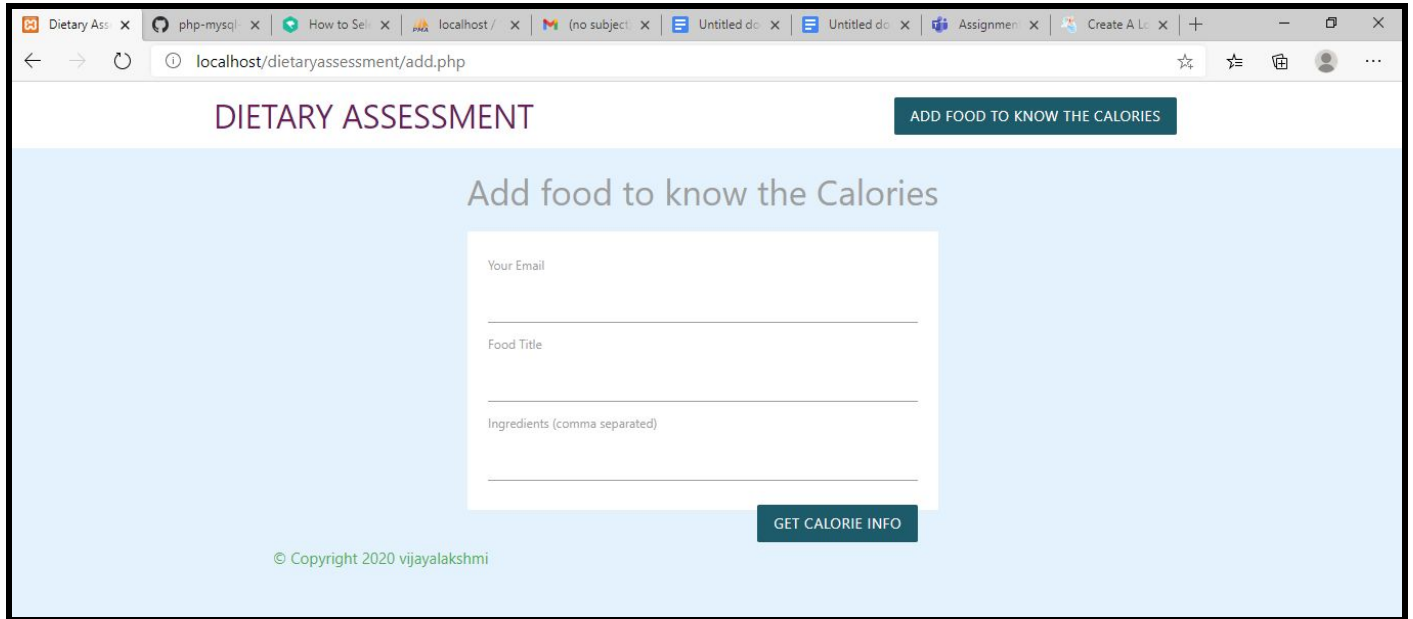
1
2
3     <footer class="section">
4         <div class="center green-text">&copy; Copyright 2020 vijayalakshmi</div>
5     </footer>
6 </body>

```

Output Screenshots:



After clicking on 'add food to know calorie':



The screenshot shows a web browser window with the URL `localhost/dietaryassessment/add.php`. The page has a white header with the title "DIETARY ASSESSMENT" and a dark blue button labeled "ADD FOOD TO KNOW THE CALORIES". The main content area has a light blue background with the heading "Add food to know the Calories". A white form is centered on the page with three input fields: "Your Email", "Food Title", and "Ingredients (comma separated)". A dark blue button labeled "GET CALORIE INFO" is at the bottom right of the form. A copyright notice "© Copyright 2020 vijayalakshmi" is at the bottom left.

DIETARY ASSESSMENT

ADD FOOD TO KNOW THE CALORIES

Add food to know the Calories

Your Email

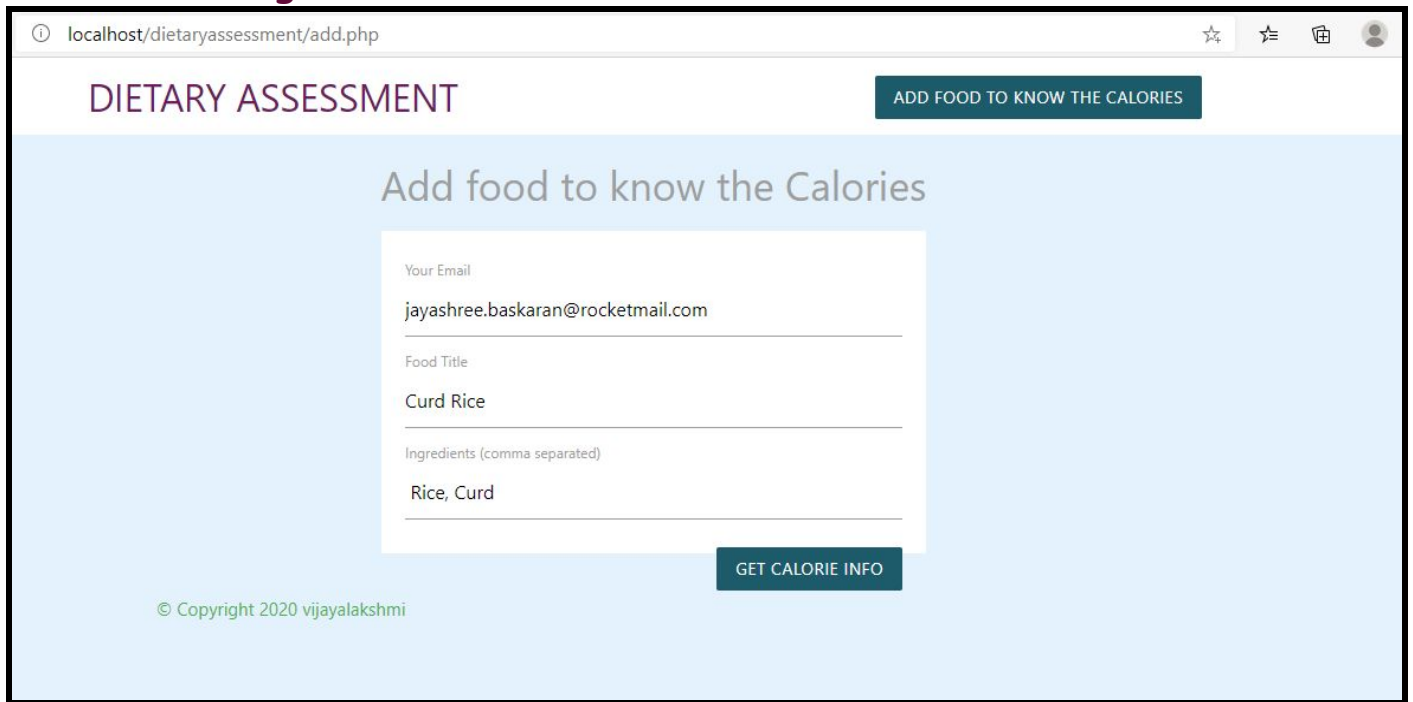
Food Title

Ingredients (comma separated)

GET CALORIE INFO

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After entering the values:



The screenshot shows the same web browser window as before, but the form fields are now filled with data. The "Your Email" field contains "jayashree.baskaran@rocketmail.com", the "Food Title" field contains "Curd Rice", and the "Ingredients (comma separated)" field contains "Rice, Curd". The "GET CALORIE INFO" button remains at the bottom right of the form. The copyright notice "© Copyright 2020 vijayalakshmi" is still at the bottom left.

DIETARY ASSESSMENT

ADD FOOD TO KNOW THE CALORIES

Add food to know the Calories

Your Email

jayashree.baskaran@rocketmail.com

Food Title

Curd Rice

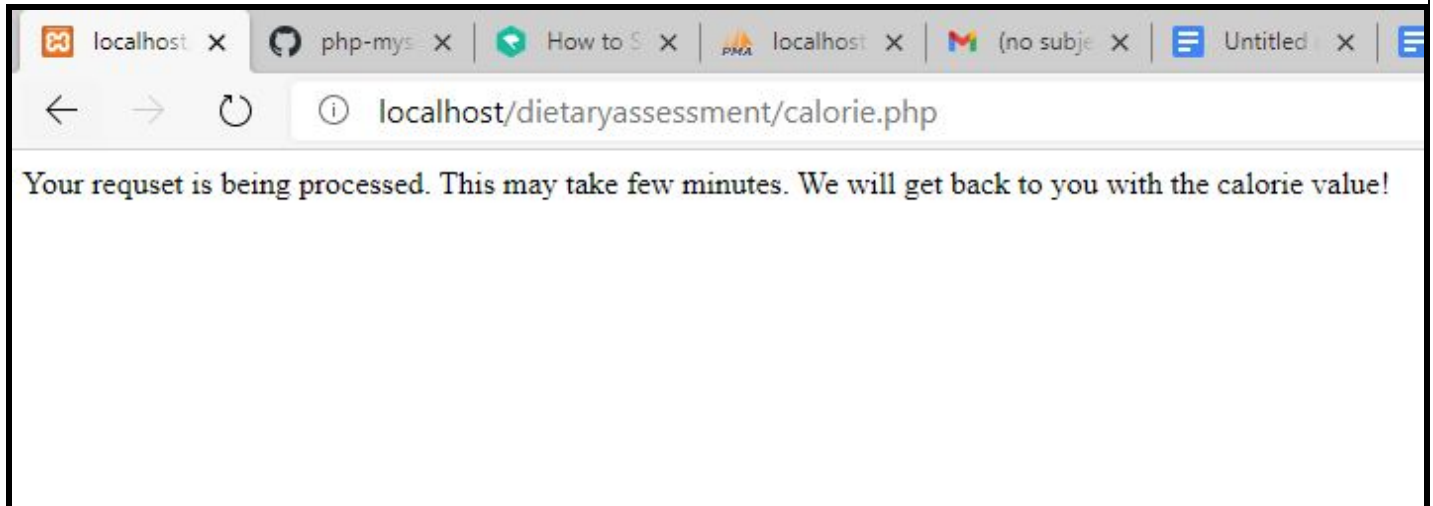
Ingredients (comma separated)

Rice, Curd

GET CALORIE INFO

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Calorie info retrieved from database:



Data getting added into the database:

A screenshot of a web browser window showing a table of food items. The address bar shows 'localhost/dietaryassessment/'. The table has three columns: 'id', 'title', and 'ingredients'. Below the table, there is a section titled 'DIETARY ASSESSMENT' with a button 'ADD FOOD TO KNOW THE CALORIES' and a copyright notice '© Copyright 2020 vijayalakshmi'.

id	title	ingredients
1	apple crisp dessert	apple,jam
2	spicy mushroom	mushrooms,greens
3	Sandwich	Bread,Cheese,Tomato
4	Lemon juice	lemon,sugar
10	Curd Rice	Rice, Curd

DIETARY ASSESSMENT

ADD FOOD TO KNOW THE CALORIES

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RESULT:

Thus the simple project using php as front end and mySQL as back end was implemented and executed successfully.