

COS10011 CREATING WEB APPLICATION

ASSIGNMENT 2 GROUP REPORT

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Tutorial Group: 2

Where and how PHP is implemented

Reuse common elements

```
C:\xampp\htdocs\assign3\include\navigation.php - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
enquiry.php navigation.php
1 <?php
2 echo '
3 <header>
4 <nav id="menu-nav">
5 <input type="checkbox" id="check">
6 <label for="check" class="checkbtn">
7 
8 </label>
9 <label class="logo"><a href="index.php"></a></label>
10 <ul class="hnav">
11 <li><a href="index.php">Home</a></li>
12
13 <li class="dropdown">
14 <div onclick="showList()" class="dropbtn">PRODUCTS &#x25BE;</div>
15 <div id="myDropdown" class="dropdown-list">
16 <a href="product1.php">Gaming Keyboards</a>
17 <a href="product2.php">Gaming Mouse</a>
18 <a href="product3.php">Gaming Controller</a>
19 </div>
20 </li>
21
22 <li><a href="enquiry.php">Enquiry</a></li>
23 <li><a href="feedback.php">Feedback</a></li>
24 <li><a href="order.php">Order</a></li>
25 </ul>
26 </nav>
27 </header> ' ;
28 ?>
```

Common elements inside a web site such as header, footer and navigation has been rewritten into PHP scripts because PHP allows us to modularize and reuse our web scripts. All other html files have also been converted into PHP files to fulfill the requirements of Assignment 3.

Create database table

```
200 //create connection
201 $conn = new mysqli($servername, $username, $password, $dbname);
202 // Check connection
203 if ($conn->connect_error) {
204     die("Connection failed: " . $conn->connect_error);
205 }
206
207 /*creating table for the id,
208 firstname, lastname, and accept maximum 25 character only
209 email accept maximum 50 character only
210 phonenumber for accepting 10 integer
211 streetaddress accept maximum 40 character only
212 city and state accept maximum 20 character only
213 postcode accept 3 integer
214 product can only accept maximum 50 characters
215 comment can accept maximum 200 characters only
216 and also store the current date and time*/
217 $sql = "CREATE TABLE enquiry (
218     id INT(6) UNSIGNED AUTO_INCREMENT PRIMARY KEY,
219     firstname VARCHAR(25) NOT NULL,
220     lastname VARCHAR(25) NOT NULL,
221     email VARCHAR(50) NOT NULL,
222     phonenumber INT(10) NOT NULL,
223     streetaddress VARCHAR(40) NOT NULL,
224     city VARCHAR(20) NOT NULL,
225     state VARCHAR(20) NOT NULL,
226     postcode INT(5) NOT NULL,
227     product VARCHAR(50) NOT NULL,
228     comment VARCHAR(200) NOT NULL,
229     reg_date TIMESTAMP DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP
230 );";
231
```

An enquiry table has been created on the MySQL database to record down all enquiry form submitted by our valuable customer via enquiry.html. There is a total of twelve column in the table which are id, first name, last name, email, phone number, street address, city, postcode, product, comment and register date. All data types in the table matches validation rules that are defined in Assignment 2. At the end of the form, there will be a submit button. On clicking the button, all information of the enquiry form will be sent to the server to be processed by enquiry_process.php and stored into the table.

enquiry_process.php

```
117 if (strlen($city) > 25) {  
118     echo "Please enter a valid city. ";  
119 }  
120  
121 // checking state  
122 //if the value is empty print the error message  
123 if (empty($_POST["p_state"])) {  
124     echo "Please select a state. ";  
125 }  
126 // checking postcode  
127 //if the value is empty print the error message  
128 if (empty($_POST["p_code"])) {  
129     echo "Postcode is required. ";  
130 }  
131 else {  
132     // this is use to call the function test_input()  
133     $pcode = test_input($_POST["p_code"]);  
134     //if the input length is not equal to 5 print the error message  
135     if (strlen($pcode) != 5) {  
136         echo "Please enter a valid postcode.\n";  
137     }  
138     // checking phone number  
139     //if the value is empty print the error message  
140     if (empty($_POST["phone_number"])) {  
141         echo "Phone number is required. ";  
142     }  
143     else {  
144         // this is use to call the function test_input()  
145         $phone_no = test_input($_POST["phone_number"]);  
146         //if the input length is more than 10 or less than 9 print the error message  
147         if (strlen($phone_no) > 10 || strlen($phone_no) < 9) {  
148             echo "Please enter a valid phone number.";  
149         }  
150     }  
151     // checking product  
152     //if the value is empty print the error message  
153     if (empty($_POST["product"])) {  
154         echo "Please select a product which you would like to enquire about. ";  
155     }  
156 }  
157  
158 // this is function test_input()  
159 function test_input($data) {  
160     $data = trim($data); // trim the extra space, tab and newline  
161     $data = stripslashes($data); //Remove backslashes  
162     $data = htmlspecialchars($data); //used to encode user input on a website so that users cannot insert harmful HTML codes into a site  
163     return $data;  
164 }  
165 // the information above is reference to https://www.w3schools.com/php/php\_form\_validation.asp
```

Server-side data validation checking has been implemented into this PHP file to preserve the integrity of the server data. All data will be validated before storing into the database. Before validating the data, a `test_input()` function is created to strip unnecessary characters such as extra space, tab, and new line from the user input data by using `trim()`. Other than that, `stripslashes()` has also been implemented into the function to remove backslashes and `htmlspecialchars()` is used to encode user input. (`$_SERVER["REQUEST_METHOD"] == "POST"`) is to check whether the form has been submitted using the method post. If it has not been submitted through post, the validation will not run and it will display a blank form. After that, `empty()` is used to check whether the value of the variable is empty or what. If the variable is not empty, the validation will run. `Strlen()` is used to validate the user's first name, last name, address, city, postcode and phone number, if the string length exceed the estimated range, an error message will prompt. Other than that, `!preg_match()` is used to check whether the variables only contain expected characters, if not it will prompt an error message.

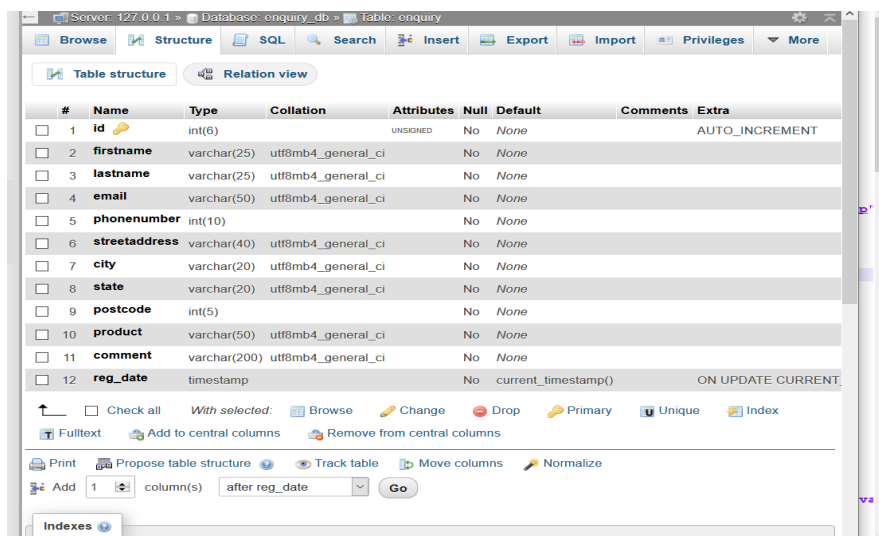
view_enquiry.php

```
35 <?php  
36  
37 if(isset($_POST['search']))  
38 {  
39     $valueToSearch = $_POST['valueToSearch'];  
40     // search in all table columns  
41     // using CONCAT mysql function as it can adds two or more expressions together.  
42     $query = "SELECT * FROM `enquiry` WHERE CONCAT('id', 'firstname', 'lastname', 'email', 'phonenumber', 'streetaddress', 'city', 'state', 'postcode', 'product', 'comment', 'reg_date') LIKE '%" . $valueToSearch . "%'";  
43     // calling the function filterTable() and show the searching results  
44     $search_result = filterTable($query);  
45  
46 }  
47 else {  
48     // to display all the value  
49     $query = "SELECT * FROM `enquiry`";  
50     $search_result = filterTable($query);  
51 }  
52  
53 // function to connect and execute the query  
54 function filterTable($query)  
55 {  
56     //connecting to the database  
57     $connect = mysqli_connect("localhost", "root", "", "Enquiry_DB");  
58     // if fail to connect print out the error message  
59     if(!$connect){  
60         die("Connection failed: " . mysqli_connect_error());  
61     }  
62     // retrieving the results from the database  
63     $filter_result = mysqli_query($connect, $query);  
64     //return the results  
65     return $filter_result;  
66 }  
67  
68  
69 <form class="filter" action="view_enquiry.php" method="post">  
70     <input type="text" name="valueToSearch" placeholder="Search">  
71     <input type="submit" name="search" value="Filter">  
72     <input type="submit" name="reset" value="Reset"><br><br>  
73  
74 <table id="process table">
```

This page will only allow the online business owner to view all enquires that are submitted by their customer. This page will retrieve all the enquiry data from the MySQL database and

display in this website. By using the `mysqli_fetch_assoc()`, all data from the table will be able to retrieve and display by using `echo`. `(mysqli_num_rows($result) > 0)` will be used to check if the table is empty or not. `die("Connection failed: " . mysqli_connect_error());` will be used to prompt error message, when it failed to connect the database.

MySQL database schema



The screenshot shows the MySQL Table Structure for the 'enquiry' table. The table has 12 columns: id, firstname, lastname, email, phonenumber, streetaddress, city, state, postcode, product, comment, and reg_date. The 'id' column is the primary key and is auto-incremented. The 'reg_date' column is a timestamp that updates to the current time on update.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	id	int(6)		UNSIGNED	No	None		AUTO_INCREMENT
2	firstname	varchar(25)	utf8mb4_general_ci		No	None		
3	lastname	varchar(25)	utf8mb4_general_ci		No	None		
4	email	varchar(50)	utf8mb4_general_ci		No	None		
5	phonenumber	int(10)			No	None		
6	streetaddress	varchar(40)	utf8mb4_general_ci		No	None		
7	city	varchar(20)	utf8mb4_general_ci		No	None		
8	state	varchar(20)	utf8mb4_general_ci		No	None		
9	postcode	int(5)			No	None		
10	product	varchar(50)	utf8mb4_general_ci		No	None		
11	comment	varchar(200)	utf8mb4_general_ci		No	None		
12	reg_date	timestamp			No	current_timestamp()		ON UPDATE CURRENT

Contribution

Team Member 1	Lim Yuan Shen
Contribution (%)	35 %
List of Contribution	Create database table, enquiry_process.php and the report about the create database table and enquiry_process.php.
Team Member 2	Nathan Yong Hao Woei
Contribution (%)	35 %
List of Contribution	View_enquiry.php and enhancement, the report about the view_enquiry.php and enhancement.
Team Member 3	Daniel Cornelius Wong Yui Herng
Contribution (%)	30 %
List of Contribution	Reuse common elements section, create database and report about the reuse common element section.