Ho Chi Minh City University of Technology

WEB PROGRAMMING

LAB 2.2 Work with DB using PHP and MySQLi

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I. Requirements

LAB 2.2 Work with DB using PHP and MySQLi (MariaDB)

- Write programming code in PHP to create a new DB with the name "OnlineStore".
- Write programming code in PHP to create new tables: "products", "users".
- Write programming code to insert:
- New products (with attributes: productID, productName, prices,)
- o New user accounts (with attributes: userID, username, password, ...). Make sure you insert hashed value of the passwords, not the plain text passwords.

Click on the link:

http://localhost/index.php?page=products

you will see a list of products, which you have stored in the table "products".

Expected outcome: you complete the files:

• products.php

II. Implementation

a. Write programming code in PHP to create a new DB with the name "OnlineStore".

```
<?php
    $dbServer = 'localhost';
   $dbUser = 'root';
   $dbPassword = '123456';
    $conn = new mysqli($dbServer, $dbUser, $dbPassword);
    if ($conn->connect error) {
        die("Connection failed: " . $conn->connect_error);
    }
    // Create a new database named "OnlineStore"
    $sql = "CREATE DATABASE OnlineStore";
    if ($conn->query($sql) === TRUE) {
        echo "Database created successfully";
    } else {
        echo "Error creating database: " . $conn->error;
    }
    $conn->close();
    ?>
```

b. Write programming code in PHP to create new tables: "products", "users".

```
<?php
    $dbServer = 'localhost';
    $dbUser = 'root';
    $dbPassword = '123456';
    $dbName = 'OnlineStore';

$conn = new mysqli($dbServer, $dbUser, $dbPassword, $dbName);

if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
}

// Create the "products" table
    $sql = "CREATE TABLE products (
    productID INT AUTO_INCREMENT PRIMARY KEY,
    productName VARCHAR(255) NOT NULL,
    price DECIMAL(10, 2) NOT NULL,
    quantity INT NOT NULL
)";
```

```
if ($conn->query($sql) === TRUE) {
        echo "Table 'products' created successfully";
   } else {
        echo "Error creating table: " . $conn->error;
   }
   // Create the "users" table
   $sql = "CREATE TABLE users (
   userID INT AUTO_INCREMENT PRIMARY KEY,
   username VARCHAR(255) NOT NULL,
   password VARCHAR(255) NOT NULL
)";
   if ($conn->query($sql) === TRUE) {
        echo "Table 'users' created successfully";
   } else {
        echo "Error creating table: " . $conn->error;
   }
   $conn->close();
    ?>
```

- c. Write programming code to insert:
 - New products (with attributes: productID, productName, prices,)
 - New user accounts (with attributes: userID, username, password, ...). Make sure you insert hashed value of the passwords, not the plain text passwords

```
<?php
    $dbServer = 'localhost';
    $dbUser = 'root';
    $dbPassword = '123456';
    $dbName = 'OnlineStore';
    $conn = new mysqli($dbServer, $dbUser, $dbPassword, $dbName);
    if ($conn->connect error) {
        die("Connection failed: " . $conn->connect_error);
    }
    // Define an array of products to insert
    $products = array(
        array("Product 1", 19.99, 100),
        array("Product 2", 29.99, 50),
        array("Product 3", 9.99, 75),
        array("Product 4", 33.99, 75),
        array("Product 5", 3000, 5),
```

```
// Add more products as needed
    );
    // Loop through the array and insert each product
   foreach ($products as $product) {
       $productName = $product[0];
       $price = $product[1];
       $quantity = $product[2];
       // SQL query to insert a product
       $sql = "INSERT INTO products (productName, price, quantity) VALUES
('$productName', $price, $quantity)";
       if ($conn->query($sql) === TRUE) {
            echo "Product '$productName' inserted successfully<br>";
        } else {
            echo "Error inserting product '$productName': " . $conn->error .
"<br>";
       }
   }
   $conn->close();
   ?>
```

```
<?php
    $dbServer = 'localhost';
    $dbUser = 'root';
   $dbPassword = '123456';
    $dbName = 'OnlineStore';
    $conn = new mysqli($dbServer, $dbUser, $dbPassword, $dbName);
    if ($conn->connect error) {
        die("Connection failed: " . $conn->connect_error);
    }
    // Define an array of users to insert
    $users = array(
        array("User1", password_hash("password1", PASSWORD_BCRYPT)),
        array("User2", password_hash("password2", PASSWORD_BCRYPT)),
        array("User3", password hash("password3", PASSWORD BCRYPT)),
        // Add more users as needed
    );
    // Loop through the array and insert each user
    foreach ($users as $user) {
```

```
$username = $user[0];
$hashedPassword = $user[1];

// SQL query to insert a user
$sql = "INSERT INTO users (username, password) VALUES ('$username',
'$hashedPassword')";

if ($conn->query($sql) === TRUE) {
    echo "User '$username' inserted successfully<br>";
} else {
    echo "Error inserting user '$username': " . $conn->error .
"<br/>"<br/>" }
}
$conn->close();
?>
```

III. Result

a. Database OnlineStore

```
mysql> SHOW TABLES;
| Tables_in_onlinestore
 products
 users
2 rows in set (0.00 sec)
mysql> SELECT * FROM users;
userID username password
                    | $2y$10$xjhVbHXYKsXWfxFrY4twRuVU3rL1DUGR10Hx08tIh9YDS0KRU8iLG
      1 User1
      2 | User2
                     $2y$10$ebbJq1F4MoGW3yegQ.2mA008wIqECgI4s6oJF1YX3w/CCwf.z0Zwi
                    | $2y$10$NQ1F9deWqsZT50GUKGDy7uxr30i0198DTuq2j/pZzkTS3n9SpHBou
      3 | User3
3 rows in set (0.00 sec)
mysql> select * from products;
| productID | productName | price
                                    quantity
           | Product 1
                              19.99
                                           100
         1
            | Product 2
                              29.99
                                           50
         2
            | Product 3
                              9.99
                                           75
         3
             Product 4
         4
                              33.99
                                           75
         5 | Product 5
                         3000.00
                                            5
5 rows in set (0.00 sec)
mysql>
```

b. product.php

NGUYEN MINH HUNG LAB Home Products Login Register

Products

ID	Name	Price	Quantity
1	Product 1	19.99	100
2	Product 2	29.99	50
3	Product 3	9.99	75
4	Product 4	33.99	75
5	Product 5	3000.00	5

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