Department of Computer Engineering

University of Peradeniya CO226-Database Systems

Lab Sheet Number: 08

Topic: MySQL-PHP Connectivity

Reg. No: E/18/397

1. Write a PHP script to establish a connection to the database. Your script should display the appropriate MySQL connection error message if it is unable to establish the connection.
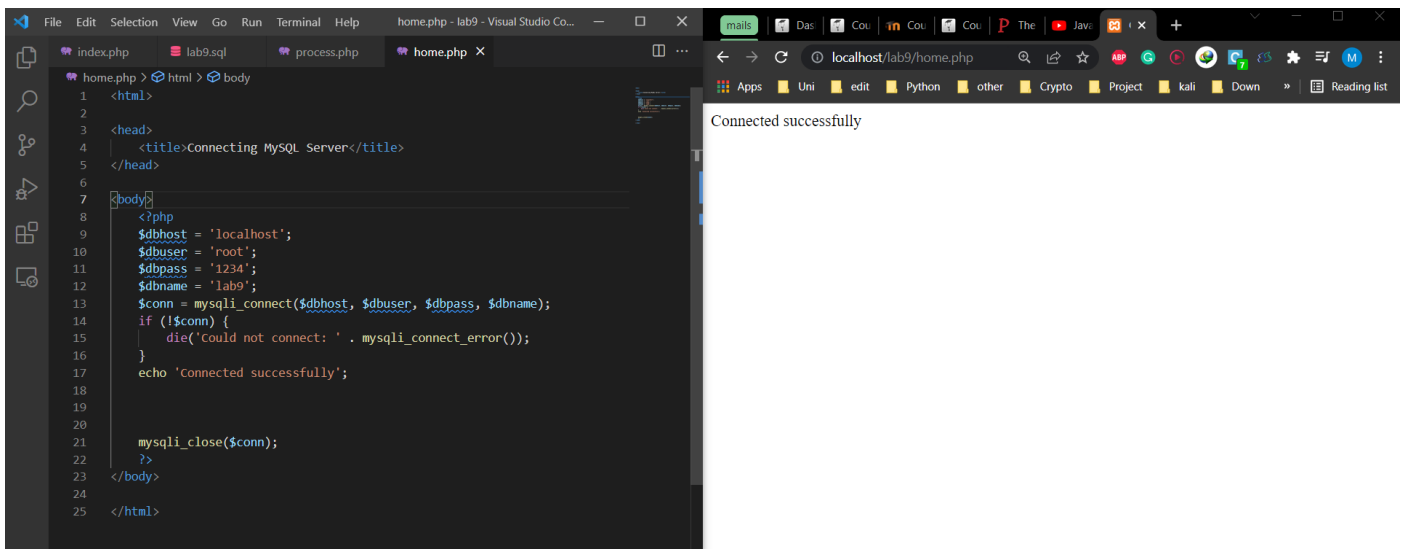

Figure 1: Code and the output of the php connectivity.

2. Modify the script to select the relevant database, create the above table and populate it with data.
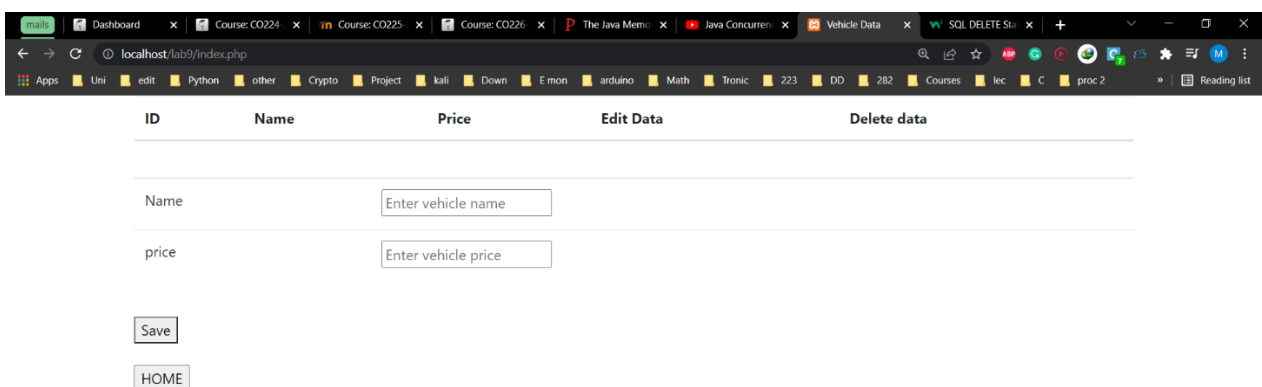

Figure 2: Before populate data to the table (No data in table)

Figure 3: After populating table with data

3. Modify the script to update the price of Volvo to 35,000.

Figure 4: Before editing the price of Volvo

ID	Name	Price	Edit Data	Delete data
1	Audi	52642	Edit	Delete
2	Merecedes	57127	Edit	Delete
3	Skoda	9000	Edit	Delete
4	Volvo	35000	Edit	Delete
5	Bentley	350000	Edit	Delete
6	Citroen	21000	Edit	Delete
7	Hummer	41400	Edit	Delete
8	Volkswagen	21600	Edit	Delete

Name   [Enter vehicle name]

price   [Enter vehicle price]

[Save]

[HOME]
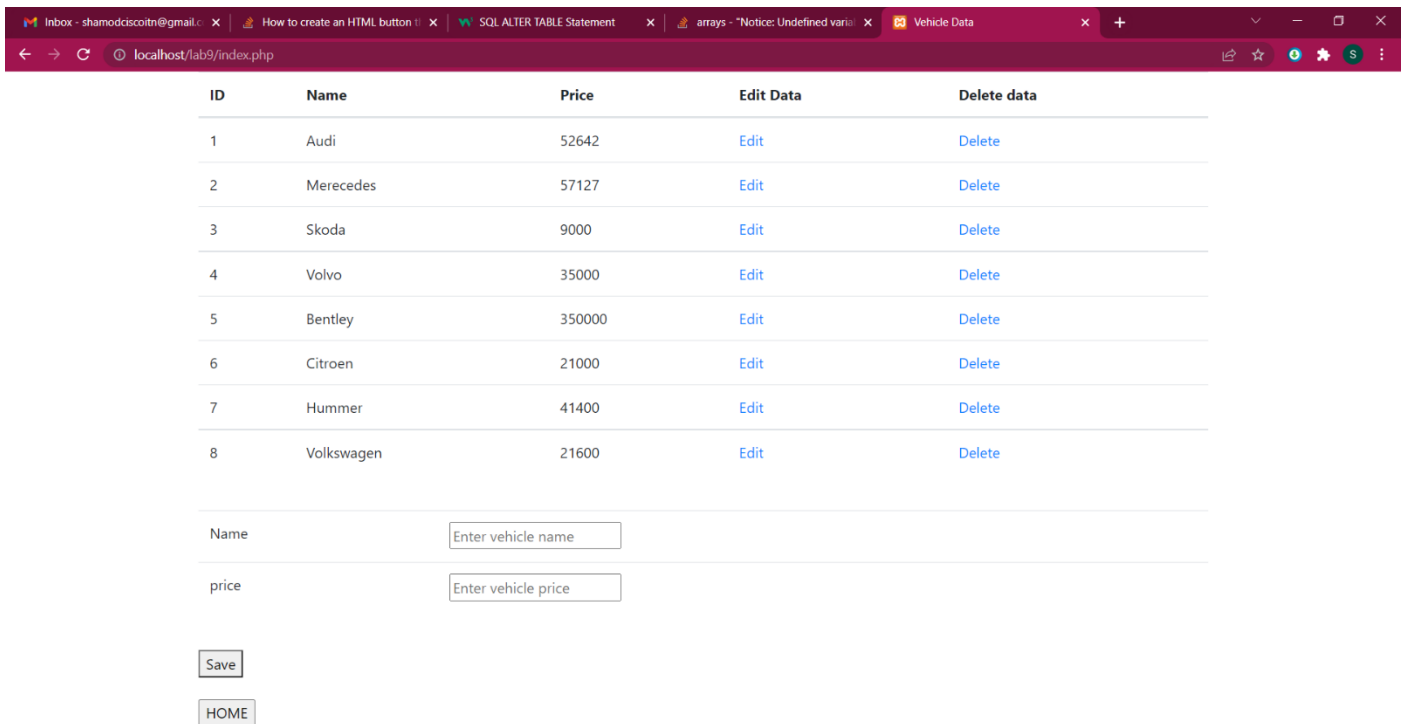
Figure 5: After updating price of the Volvo

4. Modify the script to retrieve all data of the table and display it on the web page.

ID	Name	Price	Edit Data	Delete data
1	Audi	52642	Edit	Delete
2	Merecedes	57127	Edit	Delete
3	Skoda	9000	Edit	Delete
4	Volvo	35000	Edit	Delete
5	Bentley	350000	Edit	Delete
6	Citroen	21000	Edit	Delete
7	Hummer	41400	Edit	Delete
8	Volkswagen	21600	Edit	Delete

Name   [Enter vehicle name]

price   [Enter vehicle price]

[Save]

[HOME]
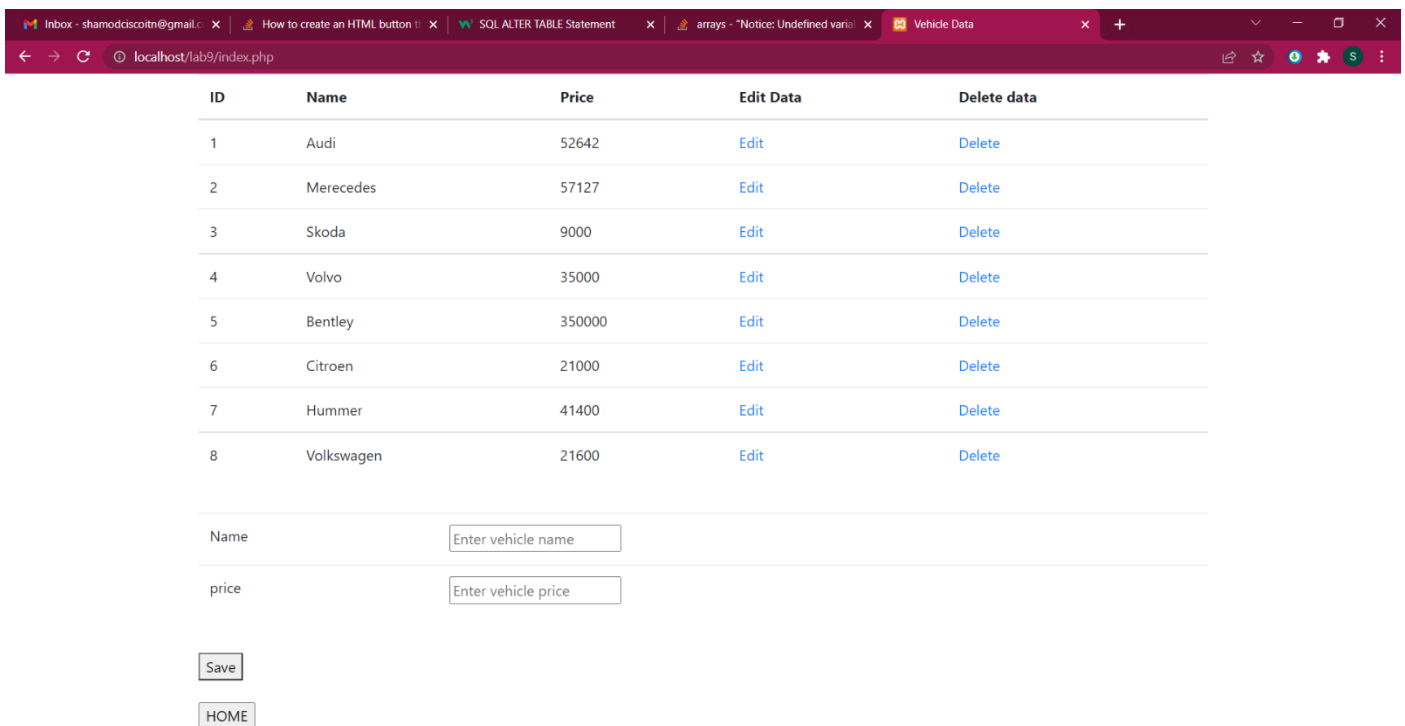
Figure 6: Displaying all the data in table

5. Delete the record of Hummer through the PHP script

ID	Name	Price	Edit Data	Delete data
1	Audi	52642	Edit	Delete
2	Merecedes	57127	Edit	Delete
3	Skoda	9000	Edit	Delete
4	Volvo	35000	Edit	Delete
5	Bentley	350000	Edit	Delete
6	Citroen	21000	Edit	Delete
8	Volkswagen	21600	Edit	Delete

Name   Enter vehicle name

price   Enter vehicle price

Save

HOME

Figure 7: After deleting record of Hummer


```sql
1
2  -- making database and selecting it
3  DROP DATABASE IF EXISTS lab9;
4  CREATE DATABASE lab9;
5  USE lab9;
6
7  -- to craete table
8  CREATE TABLE `vehicle` (
9      `id` INT NOT NULL AUTO_INCREMENT,
10     `name` VARCHAR(50),
11     `price` INT,
12     PRIMARY KEY (`id`)
13 );
14
15
16
17 -- to populate data manually
18 INSERT INTO vehicle(name, price) VALUES
19 ("Audi",52642),
20 ("Merecedes", 57127),
21 ("Skoda", 9000),
22 ("Volvo", 29000),
23 ("Bentley", 350000),
24 ("Citroen", 21000),
25 ("Hummer", 41400),
26 ("Volkswagen", 21600);
```

Figure 8: Used SQL syntaxes

```php
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@4.6.1/dist/css/bootstrap.min.css">
    <script src="https://cdn.jsdelivr.net/npm/jquery@3.5.1/dist/jquery.slim.min.js"></script>
    <script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js"></script>
    <script src="https://cdn.jsdelivr.net/npm/bootstrap@4.6.1/dist/js/bootstrap.bundle.min.js"></script>
    <title>Vehicle Data</title>
</head>

<body>
    <?php require_once 'process.php'; ?>

    <div class="container">
        <?php
        $dbhost = 'localhost';
        $dbuser = 'root';
        $dbpass = '1234';
        $dbname = 'lab9';
        $mysqli =  mysqli_connect($dbhost, $dbuser, $dbpass, $dbname);
        if (!$mysqli) {
            die('Could not connect: ' . mysqli_connect_error());
        }

        $result = $mysqli->query("SELECT * From vehicle") or die($mysqli->error);

        ?>


        <table class="table">
            <thead>
                <tr>
                    <th>ID</th>
                    <th>Name</th>
                    <th>Price</th>
                    <th>Edit Data</th>
                    <th>Delete data</th>
                </tr>
            </thead>
            <?php
            while ($row = $result->fetch_assoc()) :
            ?>
                <tr>
                    <td><?php echo $row['id']; ?></td>
                    <td><?php echo $row['name']; ?></td>
                    <td><?php echo $row['price']; ?></td>
                    <td><a href="index.php?edit=<?php echo $row['id']; ?>">Edit</a></td>
                    <td> <a href="process.php?delete=<?php echo $row['id']; ?>">Delete</a></td>
                <?php endwhile; ?>
                </tr>
        </table>


        <br>
        <form action="process.php" method="POST">
            <input type="hidden" name="id" value="<?php echo $id; ?>">
            <table class="table">
                <tr>
                    <td><label for="">Name</label></td>
                    <td><input type="text" name="name" placeholder="Enter vehicle name" value="<?php echo
$name ?>"></td>
                </tr>
                <tr>
                    <td><label for="">price</label></td>
                    <td><input type="text" name="price" placeholder="Enter vehicle price" value="<?php
echo $price ?>"></td>
                </tr>



            </table>

            <br>


            <?php
            if ($update == true) :
            ?>
                <button type="submit" name="update">Update</button>
            <?php else : ?>
                <button type="submit" name="save">Save</button>
            <?php endif; ?>

        </form>
        <br>

        <input type="button" onclick="location.href='index.php';" value="HOME"> </input>
    </div>
</body>

</html>
```

Figure 9: Final front end code (index.php)

```php
<?php
session_start();
$dbhost = 'localhost';
$dbuser = 'root';
$dbpass = '1234';
$dbname = 'lab9';
$mysqli = mysqli_connect($dbhost, $dbuser, $dbpass, $dbname);
if (!$mysqli) {
    die('Could not connect: ' . mysqli_connect_error());
}

$name = "";
$price = "";
$update = false;
$id = 0;

if (isset($_POST['save'])) {
    $name = $_POST['name'];
    $price = $_POST['price'];

    $mysqli->query("INSERT INTO vehicle(name, price) VALUES ('$name', '$price')") or
        die($mysqli->error);

    header("Location: index.php");
}

if (isset($_GET['delete'])) {

    $id = $_GET['delete'];
    $mysqli->query("Delete from vehicle where id = $id") or
        die($mysqli->error);


    header("Location: index.php");
}

if (isset($_GET['edit'])) {

    $id = $_GET['edit'];
    $update = true;
    $result = $mysqli->query("select * from vehicle where id = $id") or
        die($mysqli->error);
    if (count(array($result)) == 1) {
        $row = $result->fetch_array();
        $name = $row['name'];
        $price = $row['price'];
    }
}


if (isset($_POST['update'])) {
    $id = $_POST['id'];
    $name = $_POST['name'];
    $price = $_POST['price'];

    $mysqli->query("UPDATE vehicle set name = '$name', price = '$price' where id = $id ") or
die($mysqli->error);

    header("Location: index.php");
}
```

Figure 10: Finalized backend code (process.php)

GitHub repo link: - https://github.com/ShamodGeevinda/CO226Lab08