

1. The task is to select a table from the mini project (7.2) and create a form for this and input customer information (Customer ID, First Name, Last Name, Email, Phone, and Address), and validate the input. When the user clicks the “insert” button the values should be updated back to the database where the table is already implemented.

I used HTML to create the webpage structures and elements. The buttons, page structures, and error messages when the fields are left empty are all created using mainly HTML. Then I used PHP. This acts as a server-side scripting language that is used for dynamic web development. This involves handling form submissions, data validations, and connecting the database and the form so that the values inserted in the form are updated in the database in MySQL. I had to use the XAMPP server to connect to the phpMyAdmin database and use MySQL to create the table.

The key learning from this task is that PHP is a very useful server-side scripting language in web applications. This can be used to connect HTML values to a database like MySQL. I also learned how vital data validations are when it comes to creating forms. Last but not least, database security is achieved when the best practices are followed.

This is the link for the video demonstrating value insertion inside the database using the form.

<https://www.youtube.com/watch?v=XSJrHDvx1F4>

The coding used for creating the webpage and connecting it to the database is included below.

```
<?php
$Customer_IDError = "";
$FnameError = "";
$LnameError = "";
$EmailError = "";
$PhoneError = "";
$AddressError = "";
if(isset($_POST['Insert']))
{
    $Customer_ID = $_POST['Customer_ID'];
    $Fname = $_POST['Fname'];
    $Lname = $_POST['Lname'];
    $Email = $_POST['Email'];
    $Phone = $_POST['Phone'];
    $Address = $_POST['Address'];

    if(empty($Customer_ID))
    {
        $Customer_IDError = "Please enter the Customer ID";
    }
    if(empty($Fname))
    {
        $FnameError = "Please enter the First Name";
    }
    else
    {
        $Fname = trim($Fname);
        $Fname = htmlspecialchars($Fname);
        if(!preg_match("/^[a-zA-Z ]+$/", $Fname))
        {
            $FnameError = "First name should only have char and space";
        }
    }
    if(empty($Lname))
    {
        $LnameError = "Please enter the Last Name";
    }
    else
    {
        $Lname = trim($Lname);
        $Lname = htmlspecialchars($Lname);
        if(!preg_match("/^[a-zA-Z ]+$/", $Lname))
        {
            $LnameError = "Last name should only have char and space";
        }
    }
}
```

```

}
if(empty($Email))
{
    $EmailError = "Please enter the Email address";
}
else
{
    $Email = trim($Email);
    $Email = htmlspecialchars($Email);
    if(!preg_match("/^[a-zA-Z0-9.-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,4}$/", $Email))
    {
        $EmailError = "Email should have only 1 @ and .domain elements present.";
    }
}
if(empty($Phone))
{
    $PhoneError = "Please enter the Phone number";
}
else
{
    // Remove non-numeric characters and leading zeros
    $Phone = preg_replace("/^[^0-9]/", "", $Phone);
    //$Phone = ltrim($Phone, '0');

    // Check if the resulting phone number is valid
    if (!preg_match("/^[0-9]{10}$/", $Phone)) {
        $PhoneError = "Invalid phone number format. Please enter a 10-digit number.";
    }
}
if(empty($Address))
{
    $AddressError = "Please enter the Address";
}

if(empty($Customer_IDError) && empty($FnameError) && empty($LnameError) &&
empty($EmailError) && empty($PhoneError) && empty($AddressError))
{
    //Database connection
    $conn = new mysqli('localhost','root','','ubereats');
    if($conn->connect_error)
    {
        echo "$conn->connect_error";
        die("Connection Failed : ". $conn->connect_error);
    }
    else
    {
        $stmt = $conn->prepare("insert into customer(Customer_ID, Fname, Lname, Email, Phone,
Address) values(?, ?, ?, ?, ?, ?)");
        $stmt->bind_param("isssis", $Customer_ID, $Fname, $Lname, $Email, $Phone, $Address);
    }
}

```

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    $execval = $stmt->execute();
    if($execval)
    {
        echo "Registration successful...";
    }
    else
    {
        echo "Error: " . $stmt->error;
    }
    $stmt->close();
    $conn->close();
}
}
?>

<!DOCTYPE html>
<html>
<head>
    <title>Customer</title>
    <meta charset="UTF-8">
    <link rel="stylesheet"
        href="https://cdn.jsdelivr.net/npm/water.css@2/out/water.css">
</head>
<body>

    <h1>Customer Table</h1>
    <form method="post">

        <label for="Customer_ID">Customer_ID</label>
        <input type="number" id="Customer_ID" name="Customer_ID">
        <span style="color: red;"><?php echo $Customer_IDError ?></span>
        <br>

        <label for="Fname">Fname</label>
        <input type="text" id="Fname" name="Fname">
        <span style="color: red;"><?php echo $FnameError ?></span>
        <br>

        <label for="Lname">Lname</label>
        <input type="text" id="Lname" name="Lname">
        <span style="color: red;"><?php echo $LnameError ?></span>
        <br>

        <label for="Email">Email</label>
        <input type="text" id="Email" name="Email">
        <span style="color: red;"><?php echo $EmailError ?></span>
        <br>

        <label for="Phone">Phone</label>

```

```
<input type="string" id="Phone" name="Phone">
<span style="color: red;"><?php echo $PhoneError ?></span>
<br>

<label for="Address">Address</label>
<textarea id="Address" name="Address"></textarea>
<span style="color: red;"><?php echo $AddressError ?></span>

<br>
<button name="Insert" name='Insert'>Insert</button>
</form>
</body>
</html>
```