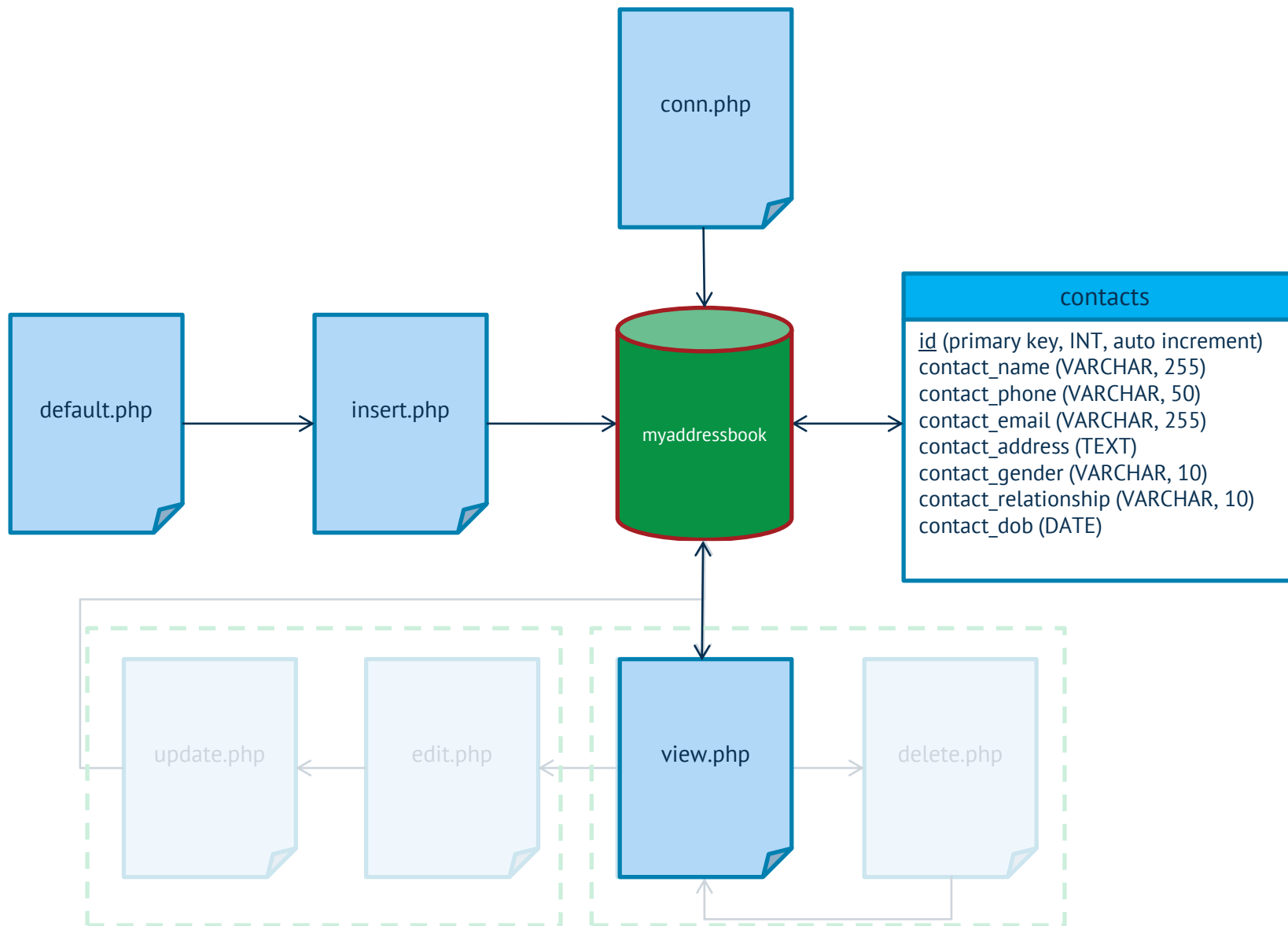


AAPP009-4-2 Web Development

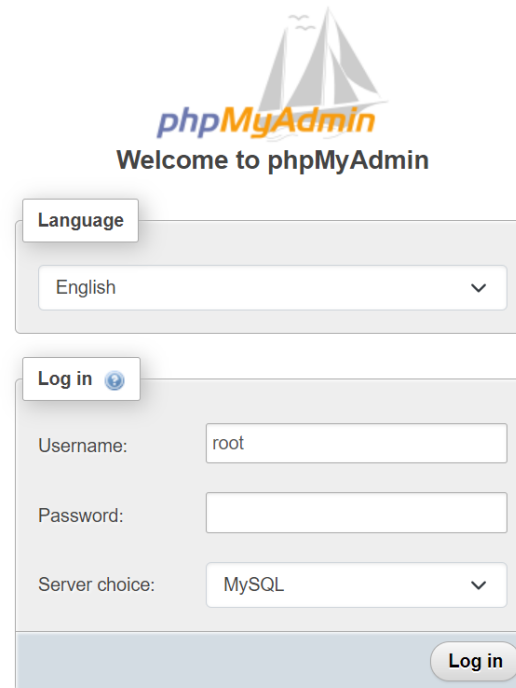
PHP & MYSQL PART 1:
DB SETUP, SQL CONNECTION, INSERT QUERY

What are we going to do today?

1. Database and Table setup
2. Create a web form (using HTML)
3. Process the web form – to store the input into Database (using PHP and SQL Query)
4. Display the data from the database table on the PHP page.



Create a database, table, fields in PHPMyAdmin



The image shows the PHPMyAdmin login interface. At the top, there is a logo with a sailboat and the text "phpMyAdmin" in blue and orange, followed by "Welcome to phpMyAdmin". Below this, there is a "Language" dropdown menu set to "English". Underneath is a "Log in" button with a blue circular icon. The main login form contains three fields: "Username:" with the value "root", "Password:" (empty), and "Server choice:" with a dropdown menu set to "MySQL". At the bottom right of the form is a "Log in" button.

1. Run WAMP/ XAMPP.
2. Open **PHPMyAdmin** page from the browser.
3. Create a database name named “myaddressbook”.
4. Under “myaddressbook” database, create a table named “contacts”.
5. Add the fields based on diagram in Slide 3.

default.php

My Address Book

Add New Profile

Name :

Phone Number :

Email Address :

Home Address :

Gender : ☐ Male ☐ Female

Relationship :

Date of Birth :

`<title>Add New Profile</title>`

`<h2>My Address Book</h2>`

`<h3>Add New Profile</h3>`

`<input type="text" name="name" required="required">`

`<input type="tel" name="phone_num" required="required"> *`

`<input type="email" name="email_address" required="required">`

`<textarea name="home_address" required="required"></textarea>`

`<input type="radio" name="gender" value="Male" required="required"> Male`

`<input type="radio" name="gender" value="Female" required="required"> Female`

`<select name="relationship" required="required">`

`<option value="">Please select</option>`

`<option value="Family">Family</option>`

`<option value="Friend">Friend</option>`

`<option value="Colleague">Colleague</option>`

`<option value="Other">Other</option>`

`</select>`

`<input type="date" name="dob">`

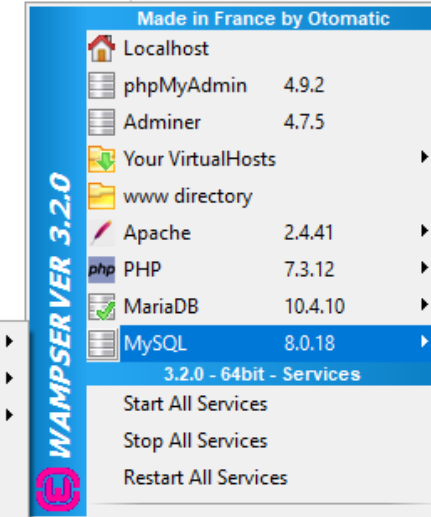
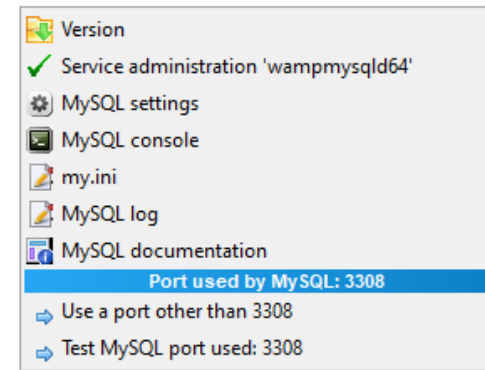
`<input type="submit" value="Submit" name="submitBtn">`

`<input type="reset" value="Reset">`

*
The tel type is currently supported only in Safari 8.

Connection to the database (conn.php)

1. Create a php file in Web Authoring Tool/ Text Editor and name it as “conn.php”.
2. Empty the preset html codes and replace it with this codes:



```
<?php
$con=mysqli_connect("localhost","root","", "myaddressbook");

// Check connection (optional)
if (mysqli_connect_errno())
{
    echo "Failed to connect to MySQL: " . mysqli_connect_error();
}
?>
```

Leave the password blank ("") if no password needed in phpmyadmin

Insert into the database (insert.php)

1. Create a php file in Web Authoring Tool and name it as “insert.php” and include these codes:

```
<?php
```

```
if (isset($_POST['submitBtn'])) {  
    include("conn.php");  
  
    $sql="INSERT INTO contacts (contact_name, contact_phone, contact_email, contact_address,  
    contact_gender, contact_relationship, contact_dob)  
  
    VALUES  
  
    ('$_POST[name]','$_POST[phone_num]','$_POST[email_address]','$_POST[home_address]','$_POST[gender]','$_POST[relationship]','$_POST[dob]");  
  
    if (!mysqli_query($con,$sql)) {  
        die('Error: ' . mysqli_error($con));  
    }  
    else {  
        echo '<script>alert("1 record added!");  
        window.location.href = "view.php";  
        </script>';  
    }  
    mysqli_close($con);  
} else {  
    echo "<script>alert('Please key in the input.');" window.location.href='default.php';</script>";  
}
```

```
?>
```

2. View the page in the browser. Key in the data in the form and check your DB if the data recorded.

```
<?php
```

```
if (isset($_POST['submitBtn'])) {
```

← The code first checks if the submit button name “submitBtn” has been submitted. This is typically the case when a form is submitted on a webpage.

```
include("conn.php");
```

← Include a file named “conn.php”. This file contains the code to establish a connection to a database.

```
$sql="INSERT INTO contacts (contact_name, contact_phone, contact_email,  
contact_address, contact_gender, contact_relationship, contact_dob)
```

```
VALUES
```

```
('$_POST[name]','$_POST[phone_num]','$_POST[email_address]','$_POST[home_add  
ress]','$_POST[gender]','$_POST[relationship]','$_POST[dob]');
```

} Prepares an SQL query to insert data into a table named “contacts”. The data to be inserted includes contact name, phone number, email address, home address, gender, relationship, and date of birth.

} The values for these fields are retrieved from the POST data. This data is sent from the form on the webpage.

```
if (!mysqli_query($con,$sql)) {  
    die('Error: ' . mysqli_error($con));  
}
```

} The SQL query is executed using the mysqli_query function. If there's an error executing the query, the script will stop execution and display the error message.

```
else {  
    echo '<script>alert("1 record added!");  
        window.location.href = "view.php";  
    </script>';  
}
```

} If the query is executed successfully, an alert message saying “1 record added!” is displayed, and the user is redirected to a page named “view.php”.

```
mysqli_close($con);
```

← After the operation, the database connection is closed using the mysqli_close function.

```
} else {  
    echo "<script>alert('Please key in the input.');  
    window.location.href='default.php';</script>";  
}
```

} If the server request method is not POST, an alert message saying “Please key in the input.” is displayed, and the user is redirected to a page named “default.php”.

```
?>
```


View the Data from the Database (view.php)

1. Create a php file in Web Authoring Tool and name it as “view.php” and include these codes:

```
<?php
include("conn.php");
$sql = "SELECT * FROM contacts";
$result = mysqli_query($con, $sql);
while ($row = mysqli_fetch_array($result)) {
    echo '<div id="box">';
    echo '<h3>' . $row['contact_name'] . '</h3>';
    echo '<p>' . $row['contact_phone'] . '</p>';
    echo '<p>' . $row['contact_email'] . '</p>';
    echo '<p>' . $row['contact_address'] . '</p>';
    echo '<p>' . $row['contact_gender'] . '</p>';
    echo '<p>' . $row['contact_relationship'] . '</p>';
    echo '<p>' . $row['contact_dob'] . '</p>';
    echo '</div>';
}
?>
```

1. `mysqli_fetch_array(\$result)`: This function fetches one row of data from the result set returned by a MySQL query and returns it as an array⁵. Each subsequent call to this function will return the next row within the result set, or null if there are no more rows.
2. `\$row = mysqli_fetch_array(\$result)`: This is an assignment operation. It assigns the array returned by `mysqli_fetch_array(\$result)` to the variable `\$row`.
3. `while (\$row = mysqli_fetch_array(\$result))`: This is a while loop that continues to fetch rows from the result set and assign them to `\$row` as long as `mysqli_fetch_array(\$result)` returns a non-null value. In other words, it iterates over all the rows in the result set.

Inside the while loop, we can access the fields of each row using the `\$row` variable. For example, if your result set includes a field named 'contact_name' from the table in the database, we could access the value of 'contact_name' in the current row with `\$row['contact_name']`.

2. View the page in the browser. Key in the data in the form by assessing default.php page

Q & A