



Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

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PHP and MySQL

Week 7

Man Geni Addysg Uwch yng Nghymru
Where Higher Education Began in Wales

www.uwtsd.ac.uk

MySQL Connectivity with PHP & HTML

- **Uniform Server:** Local web server with Apache, PHP, and MySQL.
- **Notepad** (or any code editor): To write PHP, HTML, and CSS code.
- **MySQL Console:** For database commands and setup.

What is MySQL-PHP Connectivity?

MySQL-PHP connectivity allows your PHP code to:

- **Send** data to a database (e.g., register a user)
- **Receive** data from a database (e.g., view recipes)
- **Update** or **delete** data dynamically

Project Overview – Online Cooking Site

Pages:

- register.php: Register new users
- login.php: Login page
- dishes.php: View dishes and steps
- contact.php: Feedback (logged-in users only)

Objective: Build a mini web app with database interaction and basic login.

Setup – Install Uniform Server & MySQL DB

- Download Uniform Server

<https://www.uniformserver.com>

- Run Server
- Open the folder
- Launch UniController.exe
- Start Apache and MySQL

Create the cooking Folder in Uniform Server

C:\UniServerZ\www\cooking

Place all your PHP, HTML, CSS,
and db.php files here

Create MySQL Database & Tables

Open MySQL Console via UniController:

```
CREATE DATABASE cooking_site;
```

```
USE cooking_site;
```

```
CREATE TABLE users (  
    id INT AUTO_INCREMENT PRIMARY KEY,  
    username VARCHAR(50) UNIQUE,  
    password VARCHAR(255)  
);
```

Create MySQL Database & Tables

Open MySQL Console via UniController:

```
CREATE TABLE dishes (  
    id INT AUTO_INCREMENT PRIMARY KEY,  
    name VARCHAR(100),  
    steps TEXT  
);
```

Create MySQL Database & Tables

Open MySQL Console via UniController:

```
CREATE TABLE comments (  
  id INT AUTO_INCREMENT PRIMARY KEY,  
  user_id INT,  
  dish_id INT,  
  comment TEXT,  
  FOREIGN KEY (user_id) REFERENCES users(id),  
  FOREIGN KEY (dish_id) REFERENCES dishes(id)  
);
```

Create MySQL Database & Tables

Open MySQL Console via UniController:

```
CREATE TABLE comment_log (  
    log_id INT AUTO_INCREMENT PRIMARY KEY,  
    comment_id INT,  
    log_time TIMESTAMP DEFAULT  
CURRENT_TIMESTAMP  
);
```

```
CREATE INDEX idx_user ON users(username);
```

Insert Sample Data

```
INSERT INTO dishes (name, steps) VALUES
```

```
('Spaghetti', '1. Boil pasta\n2. Make sauce\n3. Mix &  
serve'),
```

```
('Omelette', '1. Beat eggs\n2. Fry in pan\n3. Flip and  
serve'),
```

```
('Salad', '1. Chop veggies\n2. Add dressing\n3. Toss and  
serve');
```

```
INSERT INTO users (username, password) VALUES
```

```
('john', 'john123'),
```

```
('mary', 'mary123');
```

Insert Sample Data

INSERT INTO dishes (name, steps) VALUES

('Spaghetti', '1. Boil pasta\n2. Make sauce\n3. Mix & serve'),

('Omelette', '1. Beat eggs\n2. Fry in pan\n3. Flip and serve'),

('Salad', '1. Chop veggies\n2. Add dressing\n3. Toss and serve');

1. Boil pasta
2. Make sauce
3. Mix & serve

Stored Procedure

```
DELIMITER //
```

```
CREATE PROCEDURE add_comment(IN uid INT, IN did  
INT, IN cmt TEXT)
```

```
BEGIN
```

```
    INSERT INTO comments(user_id, dish_id, comment)  
VALUES (uid, did, cmt);
```

```
END //
```

```
DELIMITER ;
```

Trigger

```
DELIMITER //
```

```
CREATE TRIGGER after_comment_insert
```

```
AFTER INSERT ON comments
```

```
FOR EACH ROW
```

```
BEGIN
```

```
    INSERT INTO comment_log(comment_id) VALUES  
(NEW.id);
```

```
END //
```

```
DELIMITER ;
```

Test – call the stored procedure

```
CALL add_comment(1, 2, 'Delicious!');
```

```
SELECT * FROM comments;
```

Test – More test cases

```
CALL add_comment(2, 1, 'Needs more salt.');
```

```
CALL add_comment(1, 3, 'Perfectly cooked.');
```

```
SELECT * FROM comments;
```

Database Connection – db.php

```
<?php
$conn = new mysqli("localhost", "root", "",
"cooking_site");
if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
}
?>
```

User Registration – register.php

```
<?php include("db.php"); ?>
```

```
<form method="POST">
```

```
Username: <input type="text" name="username"><br>
```

```
Password: <input type="password"  
name="password"><br>
```

```
<input type="submit" value="Register">
```

```
</form>
```

User Registration contd... – [register.php](#)

```
<?php
if ($_POST) {
    $user = $_POST['username'];
    $pass = $_POST['password'];
    $sql = "INSERT INTO users (username, password) VALUES ('$user',
'$pass')";
    echo $conn->query($sql) ? "User registered!" : "Error: " . $conn-
>error;
}
?>
```

Login Page – login.php

```
<?php include("db.php"); session_start(); ?>
```

```
<form method="POST">
```

```
  Username: <input type="text"  
name="username"><br>
```

```
  Password: <input type="password"  
name="password"><br>
```

```
  <input type="submit" value="Login">  
</form>
```

Login Page cont...– login.php

```
<?php
if ($_POST) {
    $user = $_POST['username'];
    $pass = $_POST['password'];
    $result = $conn->query("SELECT * FROM users WHERE username='$user' AND
password='$pass'");
    if ($result->num_rows > 0) {
        $_SESSION['user'] = $user;
        header("Location: dishes.php");
    } else {
        echo "Invalid login!";
    }
}
?>
```

View Dishes – dishes.php

```
<?php include("db.php"); session_start(); ?>
<h2>Welcome <?php echo $_SESSION['user']; ?></h2>
<h3>Dishes & Steps:</h3>

<?php
$result = $conn->query("SELECT * FROM dishes");
while ($row = $result->fetch_assoc()) {
    echo "<h4>{$row['name']}</h4><p>" . nl2br($row['steps']) . "</p>";
}
?>

<a href='contact.php'>Give Feedback</a>
```

Feedback Form – [contact.php](#)

```
<?php include("db.php"); session_start(); ?>
```

```
<form method="POST">
```

```
  Dish ID: <input type="number"  
name="dish_id"><br>
```

```
  Comment: <textarea  
name="comment"></textarea><br>
```

```
  <input type="submit" value="Submit Comment">  
</form>
```

Feedback Form – contd...– [contact.php](#)

```
<?php
```

```
if ($_POST) {
```

```
    $user = $_SESSION['user'];
```

```
    $dish = $_POST['dish_id'];
```

```
    $comment = $_POST['comment'];
```

```
    $uid_result = $conn->query("SELECT id FROM users WHERE  
username='$user'");
```

```
    $uid = $uid_result->fetch_assoc()['id'];
```

```
    $conn->query("CALL add_comment($uid, $dish, '$comment')");
```

```
    echo "Comment added!";
```

```
}
```

```
?>
```

Styling – style.css

```
body {  
  font-family: Arial;  
  background: #f2f2f2;  
  padding: 20px;  
}  
  
form {  
  background: #fff;  
  padding: 10px;  
  border-radius: 5px;  
}
```

Styling – style.css

```
body {  
  font-family: Arial;  
  background: #f2f2f2;  
  padding: 20px;  
}  
  
form {  
  background: #fff;  
  padding: 10px;  
  border-radius: 5px;  
}
```

index.html

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
  <meta charset="UTF-8">
```

```
  <title>Cooking Site</title>
```

```
  <link rel="stylesheet" href="style.css">
```

```
</head>
```

```
<body>
```

```
  <h1>Welcome to the Cooking Site!</h1>
```

```
  <p>Select an option to get started:</p>
```

index.html

```
<ul>
```

```
  <li><a href="register.php">Register</a></li>
```

```
  <li><a href="login.php">Login</a></li>
```

```
  <li><a href="dishes.php">View Dishes</a></li>
```

```
  <li><a href="contact.php">Give Feedback</a></li>
```

```
</ul>
```

```
<footer>
```

```
  <p>&copy; 2025 Cooking Site</p>
```

```
</footer>
```

```
</body>
```

```
</html>
```

Save & Export

folder: cooking

files:index.html, login.php, register.php, dishes.php, contact.php, db.php, style.css

Export Database: use MySQL Console

```
mysqldump -u root cooking_site > cooking_site.sql
```

Create ZIP

- Select all files in /www/cooking/ folder + cooking_site.sql
- Right-click → Compress to ZIP (cooking_project.zip)

<http://localhost/cooking/>

Activity- simple PHP embedded in HTML

<https://forms.office.com/e/BsTKsRstHA>

