Lab 10 – PHP, AJAX, JSON and MySQL

# Purpose

* Explore MySQL using PHP, AJAX, JSON
* Upload your website to a Web server

# Due Date

* This lab must be handed in:

**Sunday April 06, 2025 – before midnight**

# Assessment

* This Lab is worth 2% of your total course mark.

# Assigned Readings

* **Lecture Slides** posted on Brightspace
* Module 5-Advanced Web Applications
* The following chapters of **Fundamentals of Web Development** will be useful in completing this exercise:
* Chapter 15, 17

# Lab Supplies

To complete this lab you will require the following lab supplies:

* Lecture Slides (**Module 5**) and Code Examples posted on Brightspace
* Textbook: **Fundamentals of Web Development** by Randy Connolly and Ricardo Hoar
* EasyPHP, or other WAMP server
* Eclipse, Notepad (or other text editor, or IDE)

# Summary of Tasks

1. Develop the logic to display your web application
2. View your webpage using a web browser
3. Submit Source Code of PHP files on Brightspace

# Task 1

Before getting started with the following tasks, review the ‘Common Look and Feel’ video provided on Brightspace (under: Course Content 🡪 Extra Materials). Using the knowledge gained in these materials, implement the following Design Pattern to create a ‘Common Look and Feel’ to be used on every page of your website.

|  |
| --- |
|  |

Your web site will include the following scripts:

* Header.php
* Footer.php
* Menu.php
* Employee.php
* GetEmployee.php
* Login.php
* ViewAllEmployees.php

**Header.php**

Header.php must contain a script to display a Common Header that will appear on every page. The header must contain a banner (images, css, etc).

**Footer.php**

Footer.php must contain a script to display a Common Footer that will appear on every page. The footer must contain Student Number, First Name, Last Name, and Email Address.

**Menu.php**

Menu.php must contain a script to display a Common Menu to be shown on every page. The menu must contain links to ViewAllEmployeees.php (ViewAllAccounts) of Lab9 and Employee.php (Employee).

**ViewAllEmployees.php**

ViewAllEmployees.php must display the same output as **Lab 9** after providing the valid login credentials.

**Employee.php/GetEmployee.php**

Contents of Employee.php/GetEmployee.php are described in detail in Task 2.

# Task 2 (Implement Employee.php with the aid of GetEmployee.php)

You need to implement a web page that can fetch information from MySQL database using AJAX and JSON. To accomplish this, you need to connect MySQL database using PHP, AJAX and JSON.

For Task 2, you need to re-use the ‘Employee’ table that you already created for your Lab 9.

Sample screenshot of the ‘Employee’ table is as below:

|  |
| --- |
|  |

**N.B.:** You may have different data in your ‘Employee’ table. But you need to make sure that there are at least 5 employees in the ‘Employee’ table of your own database.

First, you need to design Employee.php as below:

|  |
| --- |
|  |

Clicking ‘Select an employee’ should display the name of the employees from the database in the dropdown list as below:

|  |
| --- |
|  |

Then, inside Employee.php, you have to implement a function that will invoke GetEmployee.php to retrieve the information of the selected employee from the database.

When a user selects an employee from dropdown list, all information related to the selected employee need to be retrieved from the database and displayed inside Employee.php.

Sample output 1:

|  |
| --- |
|  |

Sample output 2:

|  |
| --- |
|  |

Sample output 3:

|  |
| --- |
|  |

Sample output 4:

|  |
| --- |
|  |

Sample output 5:

|  |
| --- |
|  |

Sample output 6 (After clicking ‘ViewAllAccounts’ in the menu):

|  |
| --- |
|  |

**N.B.:** Sample output may be different depending on the entries of the ‘Employee’ table of your own database.

# Task 3

Create Lab 10 submission folder ‘**Lab10**’ and copy **Employee.php, GetEmployee.php,** **Header.php, Footer.php, Menu.php, Login.PHP, ViewAllEmployees.php** and any other required files **(**e.g**. css file)** into this folder**.**

Create **Lab10.zip** file by compressing the '**Lab10'** folder. To hand in your lab go to Brightspace and navigate to Course Content 🡪 Labs. Then click on ‘Lab 10’ link. Upload **Lab10.zip** on Brightspace.

**IMPORTANT NOTE**:

**You MUST demo the lab and explain the code to the Lab Professor to get marks.**