# Assignment 1 - PHP and MySQL

## Overview:

This assignment will be done as individuals. This assignment will require that content be displayed from a MySQL database.

## Purpose:

This assignment will introduce students to working with a MySQL database, SQL and PHPMyAdmin.

## Process:

Students will create a new list, create a MySQL table to store their list data and then use PHP variables, arrays and loops to display the contents of their table on a web page.

Suggested process:

* **Step 1: Sample Data**Use a program such as Excel to make a list of your data. Include headings and multiple spreadsheets if required. Your data should include text, numbers, media, dates, etc. Be creative with your choice of Data, use something that you are passionate about and could potentially transform this assignment into a portfolio piece at a later stage.
* **Step 2: Create a MySQL Table**  
  Log into your MySQL admin tool (usually PHPMyAdmin) and create a table to store your list data. Choose consistent heading names, proper field types and lengths, a primary key and other field properties.
* **Step 3:Populate your Table**Again, use your MySQL admin tool to populate your MySQL table with sample data. Please make the data appear as real as possible. Try to include a variety of data types: text, numbers and dates.
* **Step 4: Retrieve your MySQL Data**Create a new PHP file. Connect to MySQL, select your database, and run a SELECT query.
* **Step 5: Loop Through Data**  
  Once you have your query result, use a PHP loop to iterate through the data. Within the loop create some output to confirm the loop is running the proper number of times.
* **Step 6: Output Dataset Content**  
  Within the loop output the data content in plain unformatted text. Add a few
* **Step 7: Format Content**  
  Format the data content using HTML and CSS. Validate your code using W3C validators and make your code beautiful. Demonstrate the understanding of If/Else within the loops to format data in a different way depending on your chosen dataset.

## Rubric:

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| Category | 1  Incomplete | 3  Approaching | 4  Mastery | 5  Exemplary |
|  | **Shows no or poor level of knowledge** | **Shows moderate level of knowledge** | **Shows proficient level of knowledge** | **Shows excellent level of knowledge** |
| **Code** | | | | |
| Valid HTML and CSS | Five to six W3C validation errors. | Three to four W3C validation errors. | One to two W3C validation errors. | No W3C validation errors. |
| Well Formatted Code | Code is unorganized. Code is not spaced out, not tabbed and not commented. |  |  | Code is well organized. Code is spaced out, tabbed and commented. |
| **Dataset** | | | | |
| Database | MySQL table exists but is empty. Number of columns is between one and two. No primary key is included. | MySQL table has proper sample data. Number of fields are six or more. Field names are consistently named. Some variety of field types are used. | Field types are well chosen. Lengths are appropriate. Attributes, indexes and auto increment are properly set. | Table data is stored in multiple tables and connected using a foreign key. Column properties are very well configured. Data uses encryption or base64 content. |
| SQL | The creation of an SQL statement is attempted.A database connection exists. | SQL statement is executed successfully. A result is received and placed into a variable. SQL uses SELECT and WHERE. | SQL statement is well formatted (case, tabbing, spacing, etc…). SQL statement is functional. SQL uses SELECT, WHERE, ORDER BY and LIMIT. | SQL selects multiple tables or uses a JOIN. SQL uses IDs to retrieve a single record. SQL uses INSERT, UPDATE or DELETE to manipulate database content. |
| Dataset Design | Database content is displayed using browser default fonts, colours and layout. | Database content is properly wrapped using HTML and CSS. | Database content requires the use if statements and loops. | Database content is displayed responsively. |
| TOTAL (10% of your Final Mark) | | | | |

## Submission/Deliverables:

To submit this assignment, use GitHub –push all your changes to a new repo for this assignment and submit the URL to the repo.

The due date for this assignment will be in Blackboard.

## Coding Academic Integrity

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| ☑ | Copying sample code from coding documentation such as sample variable definitions, for loops, function definitions, etc… |
| ☒ | Copying a functional block of code. Citations are required. |
| ☒ | Use of coding frameworks and or libraries. |