

Higher Diploma in Science in Software Development

Web Applications Development

Final Assessment

This assessment is worth 50% of the marks for this module

Due Date: Wednesday 19th May @ 11:59pm

BUSINESS WEBSITE DEVELOPMENT ASSIGNMENT

For this assignment, you must create a business e-commerce website that employs the principles of HTML5, CSS and JavaScript which meets the requirements specified below.

The 'business' can be of your choosing (or it can be a personal site, meeting the requirements outlined below).
You should employ a common design theme/style and colour scheme throughout.

Requirements

Your website should:

- Allow the customer to enter their login details and have login details validated (via a loginscreen) before receiving a summary of the order - You can implement the login feature any way you wish using *JavaScript* and/or *PHP*. The credentials for your website should be user and pass (all lowercase);
- Perform form validation through JavaScript or HTML to ensure that:
 - text fields are not empty
 - a valid email address is entered
- Include a slideshow or carousel which displays a different image each time the page is loaded;
- Use an object or an array in JavaScript;
- Connect to a database that contains relevant site information (eg., product info) using PHP/XAMPP (your database name should be your GMIT ID);
- Use the Bootstrap version 4 framework (via CDN);
- Allow the user to 'purchase'* items from the site;

**For this assignment, 'purchase' can mean that the user is presented with the possibility to choose a product or item, select a quantity, and if the purchased button is clicked, they will be presented with a total cost.*

Your submission should follow the submission guidelines provided on page 2 of this document

Submission Guidelines

Please ensure you **submit the following** when uploading your project:

1. **A zip file of your project**
2. **A SQL backup of your database**

ZIP FILE: Project Files and Folders

- Provide a Zip/compressed file of your project folder – any standard compressed file format is acceptable, such as zip, rar, gzip, tar. On windows, this is possible by right-clicking on your project folder and selecting “Send to” then “Compressed (zipped) folder”.

Database Backup

- Provide a backup of your Database in .sql format

How to create the database backup for submission:

- 1: Open phpMyAdmin
- 2: Click on your Database
- 3: Click on “Export”
- 4: Change “Export Method” to “Custom - display all possible options”
- 5: **Important:** Scroll down to “**Add CREATE DATABASE / USE statement**” and tick this option (no need to change any other options)

Object creation options

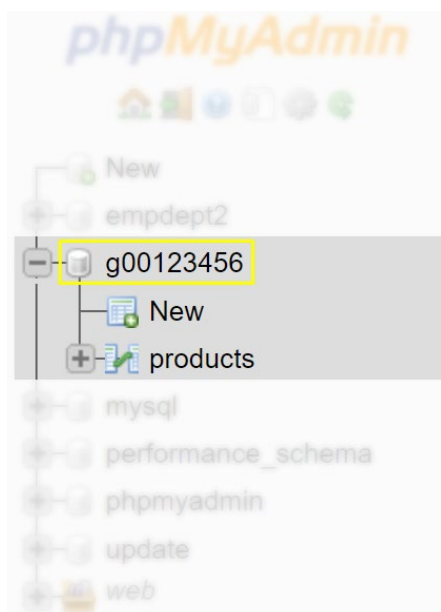
Add statements:

☒ Add CREATE DATABASE / USE statement

- 6: On the bottom of the page, click the GO button

This will create a complete backup of the database in *sql* file format.

*Note: Your **database name** should be your GMIT ID, for example:*



(Table names can be any name you choose)

Please note the following on your code and comments

All major blocks of code (HTML, CSS, JavaScript and PHP) should include comments that describe its function

All classes and ID's **created by you** must be accompanied by comments describing their purpose

All functions in JavaScript **must** include a comment describing their purpose

Format of comments in your project

HTML and BOOTSTRAP

- Lines of comments should relate to the line or block of code directly underneath and should provide a brief description of the purpose of the code

```
<!-- Bootstrap "Card" component for Movie Purchase -->
<!-- shadow-lg class added to add shadow to card -->
<div class="card collapse shadow-lg" id="myCard" style="width: 30%;">
  
  <div class="card-body">
    <h5 class="card-title">Purchase</h5>
    <p class="card-text">Purchase Movie</p>
    <!-- Card button, with onclick event to trigger purchaseMovie() function -->
    <a href="#" class="btn btn-primary" onclick="purchaseMovie()">Save</a>
  </div>
</div>
<!-- END OF Bootstrap "Card" component -->
```

CSS

- Lines of comments should relate to the code directly underneath and should provide a brief description of the purpose of the line of code. All classes and IDs should have comments describing their purpose

Example:

```
/* Red Border class for input box on pages 2 and 3 */
.inputBoxBorder {
  border: thin solid red;
}

/* Type class for paragraphs on all pages */
#setTypeRed {
  font-weight: bold;
  color: red;
}
```

JavaScript Example

- Lines of comments should relate to the line of code directly underneath and should provide a brief description of the purpose of the line of code

Example:

```
//Declare variable to record product code
var choice;

//Function to save value in inbox to choice variable
function specifyProduct() {
    //Make choice variable equal to value in input box with id
    //of 'inbox'
    choice = document.getElementById("inbox").value;
}
```

If you have code you wish to use but you are unsure of how it works, or code you sourced from an external location (such as w3schools), it should be referenced in the following manner:

HTML/Bootstrap code from an external source, such as W3Schools, getBootstrap.com, etc:

```
<!-- Code block taken from: https://getbootstrap.com/docs/4.3/components/jumbotron/ -->
<!-- Unsure as to working of this code - this displays a Jumbotron -->
<div class="jumbotron jumbotron-fluid">
    <div class="container">
        <h1 class="display-4"></h1>
        <p class="lead">My Data is Here</p>
    </div>
</div>
<!-- End Code Block -->
```