



# Abertay University

## **School of Design and Informatics**

### **Assessment Instrument Coversheet**

Module Code:	CMP204
Module Title:	Dynamic Web Development 1
Unit of Assessment:	Unit 2 (60%)
Learning Outcomes:	1, 2, 3, 4
Lecturer:	Dr Lynsay Shepherd
Submission Date:	15 <sup>th</sup> December 2020
Feedback Return Date:	15 working days
Feedback Type:	Feedback via My Learning Space
Grading Criteria:	Refer to final page of this document

## **CMP204 Dynamic Web Development 1**

### **Unit 2- Portfolio (Server-Side Application)**

#### **Task**

The coursework for this module involves the development of a dynamic web application. You should build your application week-by-week, adding in new skills you have learned. The full details of the assessment are outlined in this document.

You must **not** use WordPress or any other content management system when developing your coursework web application.

#### **1. Web Application – Server-Side (60%)**

You will need to develop a server-side web application. The web application must be based around **a musical band or solo artist**. The requirements for the submission are outlined in the sections below.

**This must be different to the web application submitted for unit 1.**

#### **General requirements**

The web application must look professional, and possess the following characteristics:

- An attractive layout, suitable colour scheme, and a good use of images
- Good contrast between the background and text
- Clear functionality from the perspective of the user

#### **Specific requirements**

The web application should be dynamic with the following technical requirements:

- A clear use of HTML5
- Use of the Bootstrap framework providing a responsive layout
- Use of AJAX (pure JavaScript i.e. without the use of a library)
- Use of the jQuery AJAX function
- User login functionality (PHP/MySQL)
- Ability to select, add, edit and delete information from a database (PHP/MySQL)

- Appropriate consideration of relevant laws e.g. the “Cookie Law” and GDPR
- Security measures
  - SQL queries should be written as prepared statements
  - Passwords should be salted and hashed
  - Validation of user input

These requirements need to be addressed individually - you cannot implement one feature and expect it to count for multiple items on this checklist. To give an example, you will need separate features for meeting the requirement of using pure JavaScript AJAX and using the jQuery AJAX function.

You should include a requirements page in your application (named req.html – a template has been provided). For each of the requirements provide a sentence or two, explaining how you implemented the requirement. Please also indicate the names of the files, and line numbers where you have implemented the requirement e.g. fileOne.html, otherFile.js, etc.

### **Additional information**

If you are using images in your application which belong to others, place a comment in your HTML page stating the URL of the original image location

### **Submission details**

Your coursework should be submitted via the coursework submission link on My Learning Space before the deadline, as indicated on the first page. Feedback will be provided by the Module Leader by the date listed on the front cover.

There is one upload area for the coursework on My Learning Space:

- Submit one single zipped folder containing all files pertaining to the web application developed. **Submit a .zip file.**

You should also host your project files on the Mayar server as follows:

- mayar.abertay.ac.uk/~studentnumber/cmp204/coursework2/

The main page of your web application should be placed in the following location:

- mayar.abertay.ac.uk/~studentnumber/cmp204/coursework2/index.php

The requirements page of your web application should be placed in the following location:

- [mayar.abertay.ac.uk/~studentnumber/cmp204/coursework2/req.html](http://mayar.abertay.ac.uk/~studentnumber/cmp204/coursework2/req.html)

**Marks will be deducted if the files have not been placed in the correct location, as the marker will be unable to fully access the application.**

**You must provide the user login details for the application with your MLS submission.**

## Marking Scheme

Marked in accordance with university regulations. See the following rubric for the marking scheme.

Requirement	Grade					
	A+/A	B+/B	C+/C	D+/D	MF	F
<b>HTML, CSS, JavaScript has been contained within separate files</b>	Excellent- code has been placed into separate files.	Very good- code has mostly been placed into separate files.	Good- some flaws or omissions with placing code into separate files.	Satisfactory- significant issues with placing code into separate files	Unsatisfactory- code contains several errors and has not been placed into separate files.	Code missing.
<b>A clear use of HTML5</b>	Excellent- HTML5 has been used throughout the application to good effect.	Very good- HTML5 has been used on most of the pages within the web application.	Good- HTML5 has been used on most of the pages within the web application with some flaws or omissions.	Satisfactory- HTML5 has been used on most of the pages within the web application with significant flaws or omissions.	Unsatisfactory- HTML code has been used but it does not follow HTML5 standards.	No HTML code submitted.
<b>Use of the Bootstrap framework providing a responsive layout</b>	Excellent- Bootstrap has been used throughout the application to provide a responsive layout.	Very good- Bootstrap has been used on most pages of the application to provide a responsive layout.	Good- Bootstrap has been used on most pages of the application to provide a responsive layout, with some flaws or omissions.	Satisfactory- Bootstrap has been used on most pages of the application to provide a responsive layout, with significant flaws or omissions.	Unsatisfactory- Limited use of Bootstrap.	Bootstrap has not been used.
<b>Use of AJAX (pure JavaScript i.e. without the use of a library)</b>	Excellent- pure AJAX used very effectively within the application.	Very good- pure AJAX used effectively within the application.	Good- pure AJAX used within the application with some flaws or omissions.	Satisfactory- pure AJAX used within the application with significant flaws or omissions.	Unsatisfactory- Limited use of pure AJAX.	Pure AJAX has not been used.
<b>Use of the jQuery AJAX function</b>	Excellent- jQuery AJAX used very effectively within the application.	Very good- jQuery AJAX used effectively within the application.	Good- jQuery AJAX used within the application with some flaws or omissions.	Satisfactory- jQuery AJAX used within the application with significant flaws or omissions.	Unsatisfactory- Limited use of jQuery AJAX.	jQuery AJAX has not been used.
<b>User login functionality (PHP/MySQL)</b>	Excellent- well designed and effective user login functionality.	Very good- effective user login functionality.	Good- working user login functionality with some flaws or omissions.	Satisfactory- - working user login functionality with significant flaws or omissions.	Unsatisfactory- Limited attempt at writing a user login.	User login not implemented.
<b>Ability to select, add, edit and delete information from a database (PHP/MySQL)</b>	Excellent- very effective application making use of queries for selecting, inserting, editing, and deleting information from a database.	Very good- effective application making use of queries for selecting, inserting, editing, and deleting information from a database.	Good- application makes use of use of queries for selecting, inserting, editing, and deleting information from a database with some flaws or omissions.	Satisfactory- application makes use of use of queries for selecting, inserting, editing, and deleting information from a database with significant flaws or omissions.	Unsatisfactory- Limited attempt at writing queries to select, add, edit and delete information from a database.	Cannot select, add, edit and delete information from a database.

<b>Appropriate consideration of relevant laws</b>	Excellent- Relevant laws are considered in great detail.	Very good- Relevant laws are considered in detail.	Good- Relevant laws are considered with some flaws or omissions.	Satisfactory- Relevant laws are considered with significant flaws or omissions.	Unsatisfactory- Limited consideration of relevant laws.	Laws have not been considered.
<b>SQL queries should be written as prepared statements</b>	Excellent- very effective use of prepared statements throughout the application.	Very good- effective use of prepared statements throughout the application.	Good- use of prepared statements with some flaws or omissions.	Satisfactory- use of prepared statements with significant flaws or omissions.	Unsatisfactory- Limited attempt at using prepared statements.	SQL queries are not written as prepared statements.
<b>Passwords should be salted and hashed</b>	Excellent- very effective use of password salting and hashing.	Very good- effective use of password salting and hashing.	Good- use of password salting and hashing with some flaws or omissions.	Satisfactory- use of password salting and hashing with significant flaws or omissions.	Unsatisfactory- Limited attempt at password salting and hashing.	Passwords are not salted or hashed. Passwords are stored as plaintext or MD5.
<b>Validation of user input</b>	Excellent- input validation has been used very effectively in the application.	Very good- input validation has been used effectively in the application.	Good- input validation has been used in the application, with some flaws or omissions.	Satisfactory- input validation has been used in the application, with significant flaws or omissions.	Unsatisfactory- Limited use of user validation in the application.	User input has not been validated.
<b>req.html contents have been completed</b>	Excellent- Req.html contents have been completed in great detail.	Very good- Req.html contents have been completed in detail.	Good- Req.html contents have been completed with some flaws or omissions.	Satisfactory- Req.html contents have been completed with significant flaws or omissions.	Unsatisfactory- req.html is largely incomplete.	req.html has not been completed.
<b>Web application is available on Mayar at the requested location</b>	Web application is available at requested location on Mayar.	N/A	N/A	N/A	N/A	Web application is unavailable at requested location on Mayar.
<b>Overall web application</b>	A+: all requirements are at grade A, with exceptional effort made in some areas. A: the majority of requirements are at grade A, with the others being in the B+/B range.	B+: most requirements are at grade B, with 1-2 in the A+/A range. B: the majority of requirements are at grade B, with the others being in the C+/C range.	C+: most requirements are at grade C, with 1-2 in the B+/B range. C: the majority of requirements are at grade C, with the others being in the D+/D range.	D+: most requirements are at grade D, with 1-2 in the C+/C range. D- the majority of requirements are at grade D, with 1-2 MFs.	MF- most requirements are at grade MF.	F: Limited evidence learning outcomes have been achieved.