SET11112 – Web Design & Development
2025/26 TR1
Coursework Specification

Learning Outcomes Covered:	L01, L02, L03
Assessment Type:	Practical Assessment / Demonstration
Overall module assessment	Practical Assessment / Demonstration
For this assessment:	100% of module assessment with the following breakdown: Part 1: 40 % Part 2: 60 %
Assessment Limits:	Word limits are provided in each section where applicable.
Submission Date:	Part-1: Monday 27/10/2025, 15:00 Part-2: Friday 05/12/2025, 15:00 **Demonstrations:** Both Part 1 & Part 2 involve a 1-to-1 live demonstrations that will be held immediately after the submission. Demonstration booking slots will be announced nearer the time.
Submission Time:	15:00
Submission Method:	Via Moodle
Turnitin:	Not Applicable
Module leader:	Dr Amjad Ullah
Tutor with Direct Responsibility:	Dr Divya Achhodawala, Dr Amjad Ullah

- You are advised to keep a copy of your assessment solutions.
- Please note regulation Section B5.3.b regards component weighting.
- Late submissions will be penalised following the University guidelines.
- Extensions to the submission date of up to 10 working days may only be given by the Module Leader for exceptional circumstances by submitting an RE1 form to them. https://my.napier.ac.uk/-/media/mynapier/section-images/your-studies/documents/academic-issues/re1-form-22_23-updated.ashx
- Feedback on submissions will normally be provided within three working weeks from the submission date.

The University rules on Academic Integrity will apply to all submissions. The student academic integrity regulations contain a detailed definition of academic integrity breaches, which includes the use of commissioned material, and knowingly permitting another student to copy all or part of his/her work.

You must not share your work with other students - this includes posting any of your work in any repository that is accessible to others (such as GitHub) and applies also after you have completed the course. You must not ask coursework-related questions online (such as on StackOverflow) and not use ChatGPT or other generative AI tools – this would constitute academic misconduct as it would be commissioning material.

By submitting the report, you are confirming that:

- It is your work except where explicit reference is made to the contribution of others.

- It has not been submitted for any module or programme degree at Edinburgh Napier University or any other institution.
- It has not been made with the assistance of Artificial Intelligence (AI) tools.

Coursework Specification

Your web design company has been invited to compete for a contract to develop an online sports equipment store for a large retailer. The retailer sells a wide range of products, including footwear, clothing, accessories, and sports equipment for multiple activities (e.g., football, basketball, running, tennis, and gym training).

The system must allow customers to create an account, log in securely, browse products across categories, and add items to a shopping cart. Products should include full details such as name, description, price, stock availability, category, and variants (for example, sizes or colours). Customers must be able to manage their cart by adding, updating, or removing products before confirming their order. Although a payment system is not required at this stage, the checkout process should mimic a realistic shopping flow.

The system must also provide administrator features to allow staff to log in and manage the product catalogue. This includes the ability to add new items, update product details, adjust stock availability, and remove discontinued or sold-out products.

The design of the site must be professional and visually engaging, while prioritising clarity, usability, and speed, as these are critical factors in online shopping environments. Customers should be able to quickly find what they are looking for, understand product details without confusion, and easily move through the purchasing process.

The overall coursework is distributed into the following two parts. Each part will be submitted separately and at different times. Please also note that each part will be marked separately, but the grade depends on the total marks of both parts rather than individual parts. Therefore, it is not possible to predict grades based solely on the marks for one part.

Part-1

This part accounts for 40% of the total module marks. This involves a written report and a simple prototype website. This part consists of the following tasks.

1. You are required to conduct research into existing sports equipment or related e-commerce websites such as Sports Direct, Decathlon, or JD Sports. From this research, write a summary of the design choices, user interface features, and overall usability of these sites. Clearly state what you liked and disliked about each website and explain how these observations have influenced your own prototype design. You must include URLs for the sites you reviewed, and your discussion should highlight specific features such as navigation menus, product displays, filtering options, or checkout processes. **(500 words max, 5 marks)**
2. Eventually, you will need a way of comparing the quality of your prototype with that of its competitors. Compile a list of ten (10) criteria from an appearance

viewpoint, which could be used to measure the quality of a site such as yours. Try to select criteria on which independent assessors might agree. For example, "nice" is too open to individual interpretation; "generous use of white space" is better; "the page height lies within the average browser window, so scrolling is not necessary" is very precise (though not necessarily applicable, depending on the example). For each criterion, give a short description of why you decided that it was important in this context. **(10 criteria, 5 marks)**

3. Suggest five (5) ways of measuring the success or otherwise of the website itself when it is finally published and operational. These measurements will be important when measuring the success of changes. These measurements must be numerically measurable: "A professional appearance" is difficult to measure, whereas "a 10% increase in business" can be measured. This section is about the business effectiveness of an operational website, whereas Section 2 is only about the appearance of the web pages. **(05 measurements, 5 marks)**

4. Provide a horizontal prototype for the site, containing several linked web pages. "Horizontal prototype" means that it looks real, but it doesn't work. The pages are to be of HTML, CSS and images only, i.e., no PHP or other server languages at this stage. Please write your code and do not use the code of others (this also rules out the use of built-in frameworks). The pages should consist of the following essential functions related to the given scenario:
    *   The application's landing page (home page),
    *   Registration/Login page for customers,
    *   Product page with a clear display of different products along with relevant information,
    *   Cart handling, at least where the customer can select, add, update and delete items,
    *   Some functionality to demonstrate the use of HTML Forms.
    *   Administrative page/s where products can be added/removed.

    This task will be evaluated based on the overall structural layout, appearance, uniformity, correct use of the technologies, an appropriate file structure, ***and the ability to clearly explain and present the functionality in the 1-to-1 live demonstrations***. **(25 marks)**

Submission notes for Part 1: All your work for Part 1 will be submitted in a zipped file called **cw_part1_MN.zip**, where "MN" is your matriculation number. The zipped file will contain a written report document (Word/PDF) describing your answers for Tasks 1 to 3 in a well-structured format, and a folder called 'prototype' containing all contents (HTML, CSS, any JavaScript, and images) for Task 4. The one-to-one demonstration is compulsory, and failure to attend will result in a mark of ***zero (0) out of 25 for Task 4***. Details on booking time slots for the demonstration will be announced closer to the deadline.

Part-2

This part accounts for 60% of the total module marks. It involves the creation and deployment of a working interactive website. During this work, if you want, you may use a publicly available framework, such as w3.css or Bootstrap. However, you are not allowed to use a content management system such as WordPress, Joomla, website templates or any web application frameworks such as Laravel or Symfony. In this part, the following tasks are required:

1. You are required to create a website which runs on a server. Your website should be interactive and contain the following features. The total marks for this question will be distributed among the following features:

   - Several web pages to facilitate the following essential functions:
     1. User registration and authentication
     2. User-friendly display of different products along with all the required information, e.g. name/description, price, etc
     3. Cart handling and order placement. You aren't required to integrate the payment function,
     4. Cart handling operations like add/update/delete item/s,
     5. Any use of HTML Form as a contact us or data entry of the items,
   - Client-side form validation,
   - PHP sessions and session storage,
   - Admin functionality for product maintenance,
   - Your code is to validate against the W3C HTML5 document type definition and CSS definition.
   - Your written report is to contain details of URLs, login names and passwords needed to access your site.

   This task will be evaluated based on the overall quality of the website, the underlying implementation, *and the ability to clearly explain and present the functionality in the 1-to-1 live demonstrations*. The overall quality of the website will be considered in aspects like whether the features are working correctly without errors, Efficiency, and Logical correctness. Similarly, the overall quality of the implementation will include checking if all code is well-written with comments and structure, the structure of HTML5 tags is readable and simple, and no in-line CSS without a good reason. **(50 marks)**

2. For this coursework, you have produced an interactive prototype, designed to help show the client what the site could be like. Nevertheless, there will be more work to do before the site goes live and starts accepting real orders. Your written report must now outline the extra work needed to make your current interactive prototype into a working professional website. You will be marked on the quantity, detail and clarity of your requirements. **(500 words max., 10 marks)**

<u>Submission notes for Part 2.</u> All your work for Part 2 will be submitted in a zipped file called cw_part2_MN.zip, where "MN" is your matriculation number. The submitted

zipped file will contain a written report document (Word/PDF) describing your answers for Task 2 in a well-structured format, and a folder called 'site' that will contain the files of your site. In addition to the files from the server, please include an exported file of your database (use PhpMyAdmin to export the file). Place this exported file in the zipped file at the same level as the written report and 'site' folder. Please also add to your written report any login names, passwords, URLs and other instructions that are needed to access the site. The one-to-one demonstration is compulsory, and failure to attend will result in a mark of **zero (0) out of 50 for Task 1**. Details on booking time slots for the demonstration will be announced closer to the deadline.

Notes

The reflection after Part 1 may lead you to modify your design and/or evaluation criteria. This is highly encouraged, and therefore, Part 2 will be marked independently of Part 1.

Relationship to the module learning outcomes

This module has the following learning outcomes:
LO1: Critically evaluate the current standards & technologies used to develop WWW systems
(Maps onto the reports of both parts of the coursework)
LO2: Critically analyse the motivation behind trends in modern web technologies and identify emerging issues.
(Maps onto the report sections in both parts of the coursework)
LO3: Design, develop and evaluate a suite of web pages using appropriate web technologies
(Maps onto the web site construction in both parts of the coursework)