

COS4018-B Internet Technologies Coursework Specification

Weight: 60%

Learning Outcomes Assessed

- design, develop, deploy and maintain static and dynamic websites
- represent, process and transfer information over the Internet
- use most current web development and programming technologies for platform-independent web applications
- analyse and apply the modes of communication using Internet technologies to present, program and communicate information on the Internet

Introduction

The idea behind this coursework is to allow you to apply the knowledge you have acquired throughout the semester to create a substantial dynamic website.

Until now, the HTML5, PHP, JavaScript, and CSS you've been working on were meant to help you practice the basic mechanics of creating web pages. These exercises have provided you with a foundation to build upon, which will allow you to utilise some of the more sophisticated features of HTML5, PHP, JavaScript, and CSS that you haven't yet encountered in your lab assignments.

Please note that this coursework is not just a mechanical exercise. Instead, it is designed to provide you with experience in the creative and artistic aspects of effective website design and implementation.

Scenario

Before you can begin to design or implement your website, you first need to determine the **theme** of that site. In other words, you need to begin by asking yourself

“What is my purpose and how do I intend to achieve it?”

I expect your coursework to be **focused on a single theme or purpose**. The theme you choose for your coursework is from the list below.

- **Top-Notch Furniture** – a new furniture shop that provides the best furniture and accessories for homes and offices
- **Pet Supplies** – a local shop that sells pet foods and accessories
- **Baby Time** – a small, upscale shop in Bradford shopping centre specializing in clothes, toys, and accessories for infants and toddlers

- **World of Books** – an online books shop
- **Flower Cart** – a new flower shop that offers a fresh new selection of floral gifts for every special occasion and every season
- **Kitchen Direct** – a small shop that sells all types of kitchen appliances
- **A Dog's Life** – a company that offers dog grooming, training, daycare, and vacation boarding services to the greater Bradford area
- **Smart Life** – a shop that sells smart IoT devices such as smart wearables, smart devices for smart homes, etc.
- **Sports Online** – a small local shop that sells sports gear, accessories and sports equipment

Pick one theme from the above options and develop a website on that theme. In general, the best **themes** are those, which allow you to share things that only you can share since such themes result in sites that offer something truly unique. Whatever you choose as your theme or purpose, make sure it is something that interests you enough to keep your attention for a while.

If you would like to work on your own theme then send an e-mail to s.kabir2@bradford.ac.uk to get a confirmation of the appropriateness of your theme for this coursework.

Further Information and Guidance

Your theme website must use **HTML5, CSS, JavaScript, PHP** and **MySQL**.

The website **must have at least four independently navigable pages**. There should be **two types of users**:

The **administrator** who maintains the site by **adding, modifying** and **deleting** some users and **uploading/updating** any materials, and images with their details such as (name, number, price, and description) to/from the database of your website, and **General users** who can view, search for particular information, and continue shopping by adding items to baskets.

The main page should show the introduction to the **theme** (topic) and the navigation menu should link to different types of **theme** web pages.

Your design should consist of the following:

1. **Sketch** of the website structure and page layout; web links to at least 4 theme pages. Also well laid out and documented HTML source code (with indentations, closing tags, comments etc.).
2. Image and text anchors within page(s) as well as to other pages, mailto link, and use at least three different font sizes and colours for the text, bulleted (unordered) and numbered (ordered) lists.
3. Use of tables, form and style sheet (CSS) for the layout of the contents of each page.
4. The theme website must be connected to your database and use dynamic information.

5. Both users should be able to **Login** and **Register** to the site, the administrator should be able to access features within the site to **add**, **remove** and **update** users and theme items to/from the database. The general users should be able to view and search for information on your website, and add and delete items in shopping baskets.

Deliverables and Submission Procedure

All source code files and database tables (as .ZIP) should be submitted via Canvas using the following instructions

1. A Word file containing the **sketch** of the site structure and layouts of different pages.
2. Text files containing all the tables of your database, and to do that you need to export your tables (database) into a text file Some_Name.sql
3. The folder of your work and its contents including the images, html, JavaScript, CSS and PHP files.
4. A **readme** file to tell us how we can run your web application, and if there is anything special, we need to know. For instance, you should include the Admin's user name and password, and the example of a general user's user name and password.

After submitting your coursework on Canvas, you **must attend a mandatory demonstration session** to present your website. The session will be organised for each student individually. It is important to note that without a demonstration, the maximum achievable mark is 40%.

Marking Scheme: see the separate file uploaded in Canvas.

Submission Deadline: 03 May 2024 by 5:00 PM