ICT502 – Internet and Web Development Assessment 3 – Individual Assignment

Assessment Task: Web Application Development

Assessment Weight: 40%

Due Date: Sunday, Week 12 (1500-word Report + Recorded Oral Presentation)
Submitting your work late will attract a 10% reduction of mark for each day beyond the due date. A delay of more than 5 days will result in being granted a 0.

Objective:

The primary objective of this assignment is to enhance students' web development skills by designing and developing a web application using HTML, CSS, JavaScript, and PHP. The assignment assesses your understanding of these technologies and their practical application, as well as your ability to collaborate effectively in a team environment.

Assignment Description:

In this assignment, you will create a web application on a topic of your choice, provided it showcases your proficiency in HTML, CSS, JavaScript, and PHP. Each student should choose a business case for their web application based on the **last digit (rightmost digit) of their student ID** from the options listed below. For example, if your student ID is S20200005, you must choose Case 5.

Business Case Options:

> **Case 0: Online Bookstore** - Create a platform for users to browse and purchase books.
> **Case 1: Food Delivery Service** - Develop an app with delivery tracking for ordering food from local restaurants.
> **Case 2: Virtual Learning Environment** - Design an educational platform that supports live classes and resource sharing.
> **Case 3: Real Estate Listing Service** - Build a website to list, search, and filter real estate properties.
> **Case 4: Personal Finance Manager** - Create an app that helps users manage their budgets and track spending.
> **Case 5: Health Monitoring System** - Develop a web application for users to monitor various health parameters and receive personalised health tips.
> **Case 6: Event Planning and Ticketing** - Build a platform to organise, promote, and sell event tickets.
> **Case 7: Job Recruitment Platform** - Create a job portal where employers can post jobs and candidates can apply.
> **Case 8: Customer Feedback System** - Develop a system for businesses to collect customer feedback and generate reports.

Case 9: Travel Itinerary Planner - Build a web app for users to plan and book entire trips, including flights, hotels, and activities.

Selection Process:

Choose a theme for your web application by matching the last digit of your student ID with the corresponding business case option listed above. ***You will not receive a mark if the chosen case does not match your student ID.***

Development Steps:
- **User Interaction and Database Design:** Develop a database system to manage user profiles, authentication, and page customisation. Utilise an SQL database and PHP to establish connectivity between the website and the database.
- **Design Layout and User Interface:** Create the web application's layout and user interface using HTML and CSS. This encompasses defining the overall structure of the web application and styling various page elements.
- **Logic and Functionality Implementation:** Implement the web application's logic and functionality using JavaScript and PHP. This might include tasks like form validation, database integration, and server-side processing.
- **Testing and Validation:** Thoroughly test the web application to ensure functionality and user-friendliness. Conduct both manual and automated testing if necessary.
- **Presentation Preparation:** Prepare a recorded presentation to showcase your web application. The presentation should provide a concise overview of the web application, a demonstration of its features and functionality, and a discussion of the technologies employed in its development.

Submission Requirements:
Your submission should adhere to the following guidelines:

- Host the web application on a web server and provide a URL in the report for review.
- Submit the source code in a zip file for the web application.
- Include a report containing the following:
  Description of the web application and its features.
  Discussion of the technologies utilised in the web application's development.
  Overview of the design and development process.
  Explanation of any challenges faced and their solutions.
  Description of the testing process and its results.
  Include the URL of the website in the Word document for review.
  Please ensure that all submitted documents are well-organized and clearly presented.

Explanation of criteria:

Quality of web application design and user interface: This refers to the visual appeal and usability of the web application. Points will be awarded based on the overall design of the web application, including the layout, color scheme, and formatting.

Functionality and usability of the web application: This refers to the effectiveness and user-friendliness of the web application. Points will be awarded based on the completeness and reliability of the features, as well as the ease of use for the user.

Proper use of HTML, CSS, JavaScript, and PHP: This refers to the correct and appropriate use of the technologies required for the assignment. Points will be awarded based on the correct implementation of the technologies and the adherence to best practices.

Overall presentation and demonstration of the web application: This refers to the effectiveness of the presentation and demonstration of the web application. Points will be awarded based on the organization and clarity of the presentation, as well as the demonstration of the key features of the web application.

Quality of the report and its relevance to the web application: This refers to the quality and relevance of the written report submitted with the assignment. Points will be awarded based on the completeness and clarity of the report, as well as its relevance to the web application.

Code quality and documentation: This refers to the quality and documentation of the source code for the web application. Points will be awarded based on the readability and maintainability of the code, as well as the use of appropriate comments and documentation.

Marking Rubric

Criteria	Fail (0-49%)	Pass (50-64%)	Credit (65-74%)	Distinction (75-84%)	High Distinction (85-100%)
Topic Selection and Feature Definition (5%)	Inadequate	Limited	Satisfactory	Proficient	Exceptional
User Interaction and Database Design (10%)	Inadequate	Limited	Satisfactory	Proficient	Exceptional
Layout and User Interface Design (10%)	Inadequate	Limited	Satisfactory	Proficient	Exceptional
Logic and Functionality Implementation (5%)	Inadequate	Limited	Satisfactory	Proficient	Exceptional
Testing and Validation (5%)	Inadequate	Limited	Satisfactory	Proficient	Exceptional
Presentation Quality (5%)	Inadequate	Limited	Satisfactory	Proficient	Exceptional