Unit:

Back-End Website Development

Autumn 2024 – Summer 2025

Assignment title:

FoodFusion

Important notes

- Please refer to the *Assignment Presentation Requirements* for advice on how to set out your assignment. These can be found on the NCC Education website. Hover over 'About Us' on the main menu and then navigate to 'Policies and Procedures' then scroll to the 'Student Support' area.
- You **must** read the NCC Education document *Academic Misconduct Policy* and ensure that you acknowledge all the sources that you use in your work. These documents are available on the NCC Education website. Hover over 'About Us' on the main menu and then navigate to 'Policies and Procedures' then scroll to the 'Student Support' area.
- You **must** complete the *Statement and Confirmation of Own Work*. The form is available on the NCC Education website. Hover over 'About Us' on the main menu and then navigate to 'Policies and Procedures' then scroll to the 'Student Support' area.
- **Please make a note of the recommended word count as stated in the brief. The maximum word count limit is the recommended work count plus 10% leeway. Submissions which exceed the maximum word count limit will be marked only up to the maximum word count limit. Any text that exceeds the maximum word count limit will not be marked. You must follow the note on word count as stated in the Submission Requirements section of the brief.**
- You must submit a paper copy and digital copy (on disk or similarly acceptable medium). Media containing viruses, or media that cannot be run directly, will result in a fail grade being awarded for this assessment.
- All electronic media will be checked for plagiarism.

Introduction

FoodFusion is a culinary platform dedicated to promoting home cooking and culinary creativity among food enthusiasts. They have commissioned you to develop an engaging website that serves as a central hub for sharing recipes, culinary tips, and fostering a vibrant food community. The website should encompass the following components:

- **Homepage:** A visually appealing landing page featuring a responsive navigation bar, a brief introduction to FoodFusion's mission, a "Join Us" pop-up form (collecting First Name, Last Name, Email and password), an integrated news feed showcasing featured recipes and culinary trends and a carousel highlighting upcoming cooking events. Social media links, privacy policy and cookie consent should be prominently displayed.

- **About Us:** This section will provide information about FoodFusion's culinary philosophy, values and the team behind the platform.

- **Recipe Collection:** A curated collection of diverse recipes from around the world, categorised by cuisine type, dietary preferences and cooking difficulty.

- **Community Cookbook:** A collaborative space where members can share their favourite recipes, cooking tips and culinary experiences with the FoodFusion community.

- **Contact Us:** An interactive form allowing visitors to reach out with enquiries, recipe requests or feedback.

- **Culinary Resources:** Providing downloadable recipe cards, cooking tutorials, and instructional videos on various cooking techniques and kitchen hacks.

- **Educational Resources:** Providing downloadable resources, infographics, and videos on renewable energy topics.

The website must support user registration and login, with a security feature that locks users out after three failed login attempts, allowing reset after three minutes. It should be mobile-responsive, accessible, and include a cookie notification pop-up. A database is required for managing user accounts and tracking user interactions.

You will develop a web application that allows users to register, manage their information, and interact with the database to explore recipes, contribute to the community cookbook and engage with fellow food enthusiasts.

This project will utilise PHP, MySQL, and JavaScript and include a web service for handling user interactions and recipe submissions.

Tasks

Task 1 – Setup Database - 10 Marks

Database Table Creation

- Table Creation with Primary Keys and Foreign Keys – **5 Marks**
- Appropriate Data Types – **5 Marks**
- Use appropriate data types for each of the required fields.

Task 2 – Login and Registration - 10 Marks

Secure Registration and Login System

- Develop a system with password encryption **(5 marks)** and account lockout functionality **(5 marks)** for failed attempts.

Task 3 – Task: Create Specific Web Pages – 40 Marks

Develop and design the following web pages, incorporating detailed content and functionality as specified earlier:

1. Homepage – **8 Marks**

2. About Us – **5 Marks**

3. Recipe Collection – **5 Marks**

4. Community Cookbook – **8 Marks**

5. Contact Us – **6 Marks**

6. Culinary Resources – **4 Marks**

7. Educational Resources – **4 Marks**

Task 4 – Additionality - 12 Marks

Implement additional website features (each 3 marks), including:

- a "Sign up Now" pop-up,
- links to privacy and cookie information,
- cookie acceptance functionality, and
- integration with social media platforms.

Task 5 – Reflection - 28 Marks

Write a One Thousand **(1000)** word reflection on the project, covering the following points:

a) Screenshots and Diagrams - **4 marks**
   i. Include screenshots of all implemented web pages.
   ii. Include an ERD (Entity-Relationship Diagram) to illustrate the database structure.

b) Security Controls - **4 marks**
   i. Provide an explanation and justification of the security controls implemented in the project.

c) Learning Outcomes – **5 marks**
   i. Discuss what you learned from completing this project and how this learning will help you in your job search.

d) Version Control and Deployment Practices – **5 marks**
   i. Discuss how the project could benefit from better utilisation of version control.
   ii. Explain the advantages of implementing continuous integration practices.
   iii. Describe how leveraging cloud-based web deployment can enhance the project's scalability and reliability.

e) Challenges and Solutions – **5 marks**
   i. Discuss the challenges you faced during the project and how you overcame them.

f) Testing Table – **5 marks**
   i. Include a testing table that outlines the different tests performed on the application, including test cases, expected results, actual results, and any issues identified and resolved.

To ensure the website meets the required specifications and delivers a high-quality user experience, the following testing criteria should be established.

Test Area	Test Case Description	Expected Outcome
Homepage	Verify navigation bar responsiveness and functionality	Navigation bar works correctly on all devices
	Test "Join Us" form validation and submission	Form validates inputs and submits successfully
Core Features	Validate recipe categorization and display	Recipes are correctly categorized and displayed
	Test recipe submission and interaction features in Community Cookbook	Users can submit and interact with recipes

Test Area	Test Case Description	Expected Outcome
	Verify Contact Us form functionality and data handling	Form submits data correctly and feedback is processed
	Check availability and download functionality of Culinary Resources	Users can download recipe cards and videos
User Registration/Login	Test user registration, login, and password reset functionality	Users can register, log in, and reset passwords securely
Security	Test user data encryption and secure storage	User data is encrypted and stored securely

Submission requirements

- Your submitted work must be word-processed, justified, and double-spaced.
- You will need to hand in a printed copy of your work, with the *Statement and Confirmation of Own Work* form attached.
- You will need to submit an electronic copy.
- You will need to include your name and NCC Education student number in the header on every page of your work.
- For each task, you should present the necessary code and screen dumps (where helpful) in a word-processed document.

- All references and citations must use the Harvard Style.

Word Count

The word count for this assignment is **1,000 words**.

One Hundred **(100)** marks available.

You **MUST** state the word count in the header of your assignment and declare the number of words on your assignment cover sheet. You **MUST** confirm that you have not exceeded the stipulated word limit by more than 10%.

Any words written beyond the stipulated limit will not be read by the examiners; no marks will be awarded, and no feedback provided for any text beyond the prescribed limit.

In accordance with accepted academic practice, the notion of word count includes the following without exception:

- All titles or headings that form part of the actual text. This does not include the fly (or cover) page or reference list.
- All words that form the actual work.

- All words forming the titles for figures, tables, and boxes. However, this does not include the text within boxes, tables, or figures themselves.
- All in-text (bracketed) references.
- All directly quoted material.

Candidate checklist

Please use the following checklist to ensure that your work is ready for submission.

Have you read the NCC Education Documents *What is Academic Misconduct? Guidance for Candidates* and *Avoiding Plagiarism and Collusion: Guidance for Candidates* and ensured that you have acknowledged all the sources that you have used in your work? ❑

Have you completed the *Statement and Confirmation of Own Work* form and attached it to your assignment? **You must do this.** ❑

Have you ensured that your work has not gone over or under the recommended word count by more than 10%? ❑

Have you ensured that your work does not contain viruses and can be run directly? ❑

© NCC Education Limited 2024