SUNWAY UNIVERSITY

SCHOOL OF ENGINEERING AND TECHNOLOGY

FINAL ASSESSMENT FOR THE
BSC (HONS) COMPUTER SCIENCE
BSC (HONS) INFORMATION TECHNOLOGY
BSC (HONS) INFORMATION SYSTEMS
BIS (HONS) IN MOBILE COMPUTING WITH ENTREPRENEURSHIP
BSC (HONS) SOFTWARE ENGINEERING
BA (HONS) ENTREPRENEURSHIP

ACADEMIC SESSION   : APRIL 2025 SEMESTER

SUBJECT   : WEB1201 / WEB2014 WEB FUNDAMENTALS

RELEASE DATE   : 29 MAY 2025 00:00 MYT

SUBMISSION DATE   : 31 JULY 2025 22:00 MYT

GROUP Assignment 30%

Description

- This is a **group project** and an Individual Assignment
- Each **group should** consist of 4 or 5 members maximum.
- The total mark for this is **50** marks. This assignment carries a weightage of **30** of your group assessment marks and **20** of your individual assessment marks.
- Plagiarism, copying, and collusion is strictly prohibited.

Instructions

- Read the description of the assignment given below carefully.
- You are to develop the website using HTML, CSS, and JavaScript.
- Group submission:
  - Prepare a report on your team's website development using any document processing software such as MS Word.
  - The report should include an Appendix of meeting records and activity logs (further details on page 10).
  - A 5-minute video presentation showcasing the website.

Description of Assignment

Based on the website design plan of the group assignment, you are to develop the website using HTML, CSS, and JavaScript. You are only allowed to use your own HTML, CSS, and JavaScript. You are not to import any HTML, CSS, or JavaScript, including frameworks. Failure to adhere to this instruction will result in no marks being awarded.

Include the following in your website:

1. HTML for the website design and layout.

2. CSS for the website styling and colour.

3. Usability of the website such as labels, textboxes, dropdown lists, buttons, links, and navigations.

4. (Optional) HTML tables and multimedia objects.

5. A form that can be used for contact. You may insert this in the Contact Us page. You will have to validate the form by using JavaScript. You can decide on how the errors should be displayed to the user.

6. A sign-up function and a log in function. You can decide on how to show that a user has successfully log in.

7. Has no issues with scaling or layout on different viewport sizes and cross-browser compatible.

8. One page for yourself and your team members (picture of you and a description of yourself)

You will only need to include the functionalities mentioned above. Anything else is not necessary, and you can leave them as dummy fields or dummy buttons. For example, you can include a dummy search bar into your website if you think it is necessary, but you are not required to implement the search function. If you are working on an e-commerce website, you are not required to complete the add to shopping cart function and the function to calculate the total price, but the relevant pages must be present.

Group Submission

1. Prepare a **group report** that consists of the following sections:

Section	Description
Introduction	Provide an overview description of the website, including the objectives, scope, and the chosen theme or topic for the website.
Design Concept	Explain the design concept and rationale behind the visual appearance and layout of the website. Discuss how the design choices align with the target audience and the overall goals of the project. If there are any changes to your initial design submitted, explain and justify.
Challenges and Solutions	Describe any challenges or obstacles encountered during the project and the solutions implemented to overcome them. Discuss how the team addressed issues related to design, functionality, compatibility, or teamwork.
Implementation and Results	Provide explanations and screenshots of test cases and the test results.
References	If you have any references, provide the list in this section. Please use APA referencing style.
Appendix	Include meeting records and activity logs in this section.

2. A 5-minute video presentation:
   - To show the layout of the website under different viewport sizes.
   - To show that all functionalities work as intended.
   - With the Webcam turned on and all the group members must present one page

Marking Rubric

Group Work (15%)							
Criteria	**Unsatisfactory (0-3)**	**Satisfactory (4-5)**	**Good (6-7)**	**Excellent (8-10)**	**Rate**	**%**	**Marks**
Report and Video (15%)							
Report							
Introduction	Introduction is unclear or missing key information regarding the objectives and scope.	Introduction is present but lacks clarity or conciseness in outlining the objectives and scope.	Introduction provides a solid overview of the objectives and scope of the project.	Clear and concise introduction that effectively outlines the objectives and scope of the project.		10	
Design Concept	Design concept and rationale are either missing or poorly explained.	Limited explanation of the design concept and a weak rationale for the visual appearance and layout.	Design concept is explained with a reasonable rationale for the visual appearance and layout of the website.	Comprehensive explanation of the design concept and a well-justified rationale for the visual appearance and layout of the website.		15	
Challenges and Solutions	Minimal or no discussion of the challenges faced or lacks sufficient solutions. Shows a lack of understanding of the obstacles and their resolutions.	Limited discussion of the challenges faced, with somewhat incomplete or weak solutions. Demonstrates a basic understanding of the obstacles and their resolutions.	Adequate discussion of the challenges encountered, providing reasonable solutions that address the issues. Shows a good understanding of the obstacles and their resolutions.	Comprehensive discussion of the challenges faced during the project, accompanied by well-thought-out and effective solutions. Demonstrates a deep understanding of the obstacles and their resolutions.		20	
Implementation and Results	Incomplete or insufficient test cases and explanations, with minimal or no presentation of test results or screenshots.	Basic test cases with limited explanations and a basic presentation of test results, including some screenshots of scenarios and their outcomes.	Sufficient test cases with reasonable explanations and a presentation of test results, including screenshots that demonstrate different scenarios and their outcomes.	Comprehensive and well-documented test cases with clear explanations and a detailed presentation of test results, including screenshots that showcase various scenarios and their outcomes.		20	

Group Work (15%)						
Criteria	**Unsatisfactory (0-3)**	**Satisfactory (4-5)**	**Good (6-7)**	**Excellent (8-10)**	**Rate**	**%**	**Marks**
Language	Formatting is inconsistent with numerous grammatical and spelling errors. The writing is understandable, but the tone is not appropriate or consistent.	Formatting is consistent with some grammatical and spelling errors. The writing is mostly articulate, and the tone could be more appropriate and/or consistent.	Formatting is consistent with minimal grammatical and spelling errors. The writing is mostly articulate, and the tone is appropriate and mostly consistent.	Formatting is consistent with no grammatical and spelling errors. The writing is articulate, and the tone is appropriate and consistent.		5	
Formatting	Poorly presented and not formatted for its purpose. Adhering to very few of the instructions given in the guidelines.	Fairly well presented and formatted, though not specifically for its purpose. Adhering to some of the instructions given in the guidelines.	Well-presented and formatted, though not specifically for its purpose. Adhering to most of the instructions given in the guidelines.	Very well presented and formatted specifically for its purpose. Strictly adhering to the instructions given in the guidelines.		10	
Video							
Layout Presentation	The video fails to effectively demonstrate the layout of the website under different viewport sizes, lacking clear presentation or implementation of responsive design principles.	The video provides a basic demonstration of the layout under different viewport sizes but lacks thoroughness or clarity. Responsive design techniques are somewhat limited or not well-executed.	The video demonstrates the layout of the website under different viewport sizes, showcasing responsive design techniques to a satisfactory extent. The presentation is clear and adequately highlights the adaptability of the website.	The video effectively demonstrates the layout of the website under different viewport sizes, showcasing responsive design techniques and adaptability. The presentation is clear, visually appealing, and demonstrates a deep understanding of responsive design principles.		10	
Functionality Demonstration	The video fails to effectively demonstrate the functionalities of the website as intended, lacking clear presentation	The video demonstrates some of the functionalities of the website, but there are gaps or inconsistencies in showcasing the intended	The video demonstrates most of the functionalities of the website as intended, showcasing a satisfactory understanding of the	The video demonstrates all the functionalities of the website as intended, showcasing a thorough understanding of the		10	

Group Work (15%)						
Criteria	**Unsatisfactory (0-3)**	**Satisfactory (4-5)**	**Good (6-7)**	**Excellent (8-10)**	**Rate**	**%**	**Marks**
	or implementation of the required functionality.	functionality. The presentation lacks clarity or thoroughness in communicating the functionality of the website.	project's requirements. The presentation is clear and adequately communicates the functionality of the website.	project's requirements. The presentation is clear, organized, and effectively communicates the functionality of the website.			
Report and Video Total (100%)						
Report and Video Contribution to Assessment (15%)						
Website (15%)						
Design and Layout	Limited or poor design and layout, lacking in visual appeal and coherence.	Fair design and layout, with some inconsistencies or areas for improvement in terms of visual aesthetics and organization.	Good design and layout with a cohesive visual appearance and suitable organization. Shows effort in creating an attractive and user-friendly interface.	Exceptional design and layout that is visually appealing, consistent, and effectively supports the chosen theme. Demonstrates creativity and attention to detail.		20	
	The website lacks proper scaling and layout on different viewport sizes, with significant issues or limitations that hinder optimal display and usability on various devices.	The website has some issues with scaling and layout on different viewport sizes, such as minor inconsistencies or limitations in adaptation, resulting in occasional display or usability challenges on specific devices or screen sizes.	The website exhibits satisfactory scaling and layout on different viewport sizes, with reasonable adaptation, responsive design, and effective use of space, ensuring a functional and visually pleasing experience on various devices.	The website demonstrates exceptional scaling and layout on different viewport sizes, with seamless adaptation, responsive design, and optimal use of space, ensuring a visually appealing and user-friendly experience across devices.			
	The website lacks proper responsiveness and cross-browser compatibility, with significant issues or	The website has some responsiveness or cross-browser compatibility issues, with minor	The website demonstrates satisfactory responsiveness and cross-browser compatibility, with	The website is fully responsive and compatible across various devices and browsers, with a seamless			

			Group Work (15%)				
Criteria	**Unsatisfactory (0-3)**	**Satisfactory (4-5)**	**Good (6-7)**	**Excellent (8-10)**	**Rate**	**%**	**Marks**
	limitations that hinder proper display and functionality across devices and browsers.	inconsistencies or limitations in adapting to different devices or browsers, resulting in occasional display or functionality issues.	reasonable adaptation to different devices and browsers, ensuring a functional and visually appealing experience.	user experience and consistent design and functionality across different platforms.			
Styling and Colour	The website lacks coherent styling and colour choices, with poor visual elements and inconsistent use of colour that result in a visually unappealing presentation.	The website has some styling and colour inconsistencies, with occasional design elements or colour choices that detract from the overall aesthetics and cohesion.	The website demonstrates satisfactory styling and appropriate use of colour, with reasonably consistent visual elements that contribute to the overall aesthetics and presentation.	The website showcases exceptional styling and effective use of colour, with consistent and visually appealing elements that enhance the overall aesthetics and create a cohesive design.		20	
Functionality	Limited or poor implementation of functionality and interactive elements, resulting in a lack of user engagement or interactivity.	Fair implementation of some functionality and interactive elements, but with limited complexity or room for improvement.	Good implementation of basic functionality and interactive elements that provide meaningful interactions for users.	Implementation of advanced functionality and interactive elements that enhance user experience and engagement. Demonstrates creativity and mastery of web programming concepts.		20	
Usability	The website lacks proper usability, with confusing navigation, poor content organization, and minimal user interactions, resulting in a challenging or frustrating user experience.	The website has some usability issues, with suboptimal navigation, inconsistent content organization, or limited user interactions, impacting user experience and accessibility.	The website exhibits satisfactory usability, with reasonably intuitive navigation, coherent content organization, and satisfactory user interactions that contribute to a user-friendly experience.	The website demonstrates excellent usability, with intuitive navigation, clear content organization, and effective user interactions that enhance user experience and accessibility.		20	
Code Quality	Code organization and	Code organization and	Generally clean and	Clean, well-structured, and		20	

		Group Work (15%)					
Criteria	**Unsatisfactory (0-3)**	**Satisfactory (4-5)**	**Good (6-7)**	**Excellent (8-10)**	**Rate**	**%**	**Marks**
and Organisation	structure are lacking, making it difficult to understand and maintain the code.	structure are fair but could benefit from better adherence to coding standards and improved documentation.	organized code with some minor areas for improvement in terms of code structure and documentation.	organized code that follows best practices and coding standards. Demonstrates proficiency in web programming principles.			
				Website Total (100%)			
				Website Contribution to Assessment (15%)			
				Report and Video Contribution to Assessment (15%)			
				Group Work Subtotal (30%)			

Meeting Records and Activity Logs

Individual Contribution to Group Work

The report must include an appendix of meeting records and activity log records.

The meeting record template is as follows:

Date	Attended by	Items Discussed

The activity log record template is as follows:

Date	Progress	Recorded by

Individual Assignment – 20 %

Description
- This is an **Individual assessment.**
- The total marks for this is 100 marks. This assignment carries a weightage of **20%** of your total assessment marks.
- Plagiarism, copying, and collusion is strictly prohibited.

Instructions

Assignment: Personal Portfolio Website Design (20%)

Objective: Design and develop a personal portfolio website using HTML, CSS, and JavaScript to showcase your skills, projects, and contact information. This assignment aims to assess your ability to create a well-structured, visually appealing, and interactive web page.

Submission Deadline: 31 July 2025
Total Marks: 20%

Assignment Question:

Task: Create a responsive and interactive personal portfolio website that effectively presents your profile to potential employers, collaborators, or clients.
Requirements:

1. **HTML Structure:**
   o The website must include at least the following sections:
      - **Home/About Me:** A brief introduction about yourself, your skills, and career aspirations.
      - **Skills:** A section detailing your technical skills (e.g., programming languages, software, tools).
      - **Projects/Portfolio:** Showcase at least two (2) distinct projects you have worked on. Each project should have a title, a brief description, and a link (if applicable) to live demos or GitHub repositories.
      - **Contact:** A contact form or clear contact information (e.g., email address, social media links).
   o Utilize semantic HTML5 elements where appropriate (e.g., <header>, <nav>, <main>, <section>, <footer>, <article>).

2. **CSS Styling:**
   - Implement custom CSS to style your portfolio website.
   - The design should be visually appealing, professional, and consistent across all pages/sections.
   - Demonstrate understanding of:
     - **Typography:** Appropriate font choices, sizes, and line heights.
     - **Color Palette:** A cohesive and harmonious color scheme.
     - **Layout:** Use CSS Flexbox or CSS Grid for responsive layouts.
     - **Responsiveness:** The website must be fluid and display correctly on various screen sizes (desktop, tablet, mobile) without horizontal scrolling. Use media queries effectively.
     - **Hover Effects/Transitions:** Incorporate subtle visual effects on interactive elements (e.g., buttons, navigation links, project cards).

3. **JavaScript Interactivity:**
   - Incorporate at least two (2) distinct JavaScript functionalities to enhance user experience. Examples include, but are not limited to:
     - **Smooth Scrolling:** Implement smooth scrolling to different sections when navigation links are clicked.
     - **Navigation Menu Toggle:** For smaller screens, create a responsive navigation menu that toggles open/closed (e.g., a "hamburger" menu).
     - **Form Validation:** Basic client-side validation for the contact form (e.g., checking if fields are empty, valid email format).
     - **Image Carousel/Slider:** For the projects section.
     - **"Back to Top" Button:** A button that appears after scrolling down and smoothly scrolls back to the top of the page.
   - Ensure your JavaScript code is well-structured and uses appropriate variable names.

4. **Code Quality & Best Practices:**
   - Write clean, well-commented, and organized HTML, CSS, and JavaScript code.
   - Adhere to best practices for file organization (e.g., separate CSS and JS files).
   - Ensure all images and assets are optimized for web use.

Submission Guidelines:
- Create a single folder named [YourName]_Portfolio (e.g., JohnDoe_Portfolio).
- Inside this folder, include all your HTML, CSS, JavaScript files, and any assets (images, fonts).
- Compress the folder into a .zip file.
- Submit the .zip file through the elearn submission link before the deadline.

Marking Rubrics: Personal Portfolio Website Design

Total Marks: 20

Criteria	Exemplary (5 Marks)	Proficient (4 Marks)	Developing (3 Marks)	Needs Improvement (1-2 Marks)	Weak (0 Marks)
HTML Structure (5 Marks)	Demonstrates exceptional use of semantic HTML5 elements. All required sections are prominently featured, meticulously structured, and logically arranged. The page structure is coherent, well-organized, and facilitates effortless navigation. Code is clean, readable, and efficiently leverages modern HTML5 semantics.	Uses semantic HTML5 elements appropriately for most sections. All required sections are present and generally well-structured. The page is organized and navigable. Code is mostly clean and readable.	Basic HTML5 elements used. Some semantic elements may be missing or incorrectly applied. Most required sections are present but may lack optimal structure or organization. Navigation might be less intuitive.	Limited use of semantic HTML5. Many required sections are missing or poorly structured. The page is difficult to navigate or understand. Code is disorganized and hard to read.	HTML structure is entirely absent, incorrect, or renders the page unusable. Missing critical required sections.
CSS Styling (5 Marks)	Features a visually stunning, professional, and highly cohesive design that consistently applies across all pages/sections. Expertly	Creates a visually appealing and professional design with good consistency. Typography, color palette, and layout are	Design is generally functional and consistent but may lack polish or visual appeal. Basic use of typography and color. Layout is functional but may not fully utilize Flexbox/Grid	Design is inconsistent, unappealing, or unprofessional. Poor choices in typography and	No CSS styling applied, or styling is completely broken and renders the page

	uses typography, color palette, and advanced CSS techniques (e.g., animations, custom properties) to create a unique and engaging experience. Achieves flawless responsiveness across all devices using advanced Flexbox/Grid and media queries. Excellent use of interactive hover effects and transitions.	well-chosen and applied. Demonstrates good responsiveness across most devices using Flexbox/Grid and media queries. Includes effective hover effects and transitions.	for optimal responsiveness. Responsiveness may be inconsistent on some devices. Limited or basic interactive effects.	color. Layout is problematic and not responsive. Minimal or no interactive effects.	unviewable or unusable.
JavaScript Interactivity (5 Marks)	Implements multiple, complex, and highly effective JavaScript functionalities that significantly enhance user experience. Code is robust, efficient, well-structured, thoroughly commented, and free of errors. Demonstrates advanced understanding of DOM manipulation, event handling, and potentially external	Implements at least two distinct and effective JavaScript functionalities. Code is generally well-structured, commented, and functional with minor issues. Demonstrates a good understanding of core JavaScript concepts. Most chosen functionalities work as	Implements at least one basic JavaScript functionality. Code may have minor errors or be less organized/commented. Demonstrates a developing understanding of JavaScript. Functionality may be limited or partially broken.	JavaScript functionality is minimal, broken, or does not enhance the user experience. Code is poorly structured, uncommented, and contains significant errors.	No JavaScript implemented, or JavaScript causes critical errors making the page unusable.

	libraries. All chosen functionalities work flawlessly.	expected.			
Code Quality & Best Practices (5 Marks)	All HTML, CSS, and JavaScript files are exceptionally clean, perfectly organized, and extensively commented, adhering to industry-standard best practices. File organization is logical and efficient. Assets are meticulously optimized for web performance. Shows strong attention to detail and a commitment to high-quality code.	HTML, CSS, and JavaScript files are clean, well-organized, and commented. Adheres to most best practices for file organization. Assets are generally optimized. Demonstrates good attention to code quality.	Code is generally readable but may have some inconsistencies in formatting or commenting. File organization is adequate. Assets may not be fully optimized. Adherence to best practices is inconsistent.	Code is messy, disorganized, and poorly commented. Inconsistent file organization. Assets are not optimized, impacting performance. Does not adhere to basic best practices.	Code is completely unreadable, disorganized, or missing. Critical files are absent or misplaced. No attempt at optimization or best practices.