

Assessment Brief - Coursework

Academic Year	2024-25
Semester	2
Module Number	CM1605
Module Title	Web Technology
	Submission 1 - Low fidelity wire frames (designed using Figma/Visio)
Assessment Method	Submission 2 – User Interface designed with HTML & CSS
	Submission 3 - Complete coursework submission A complete integrated Web Application (HTML, JavaScript, XML, CSS) zipped as a separate file + a single PDF report submitted electronically via Campus Moodle.
	Submission 1 – 7 th Feb 2025 1.00pm
Deadline (time and date)	Submission 2 – 24 th Feb 2025 1.00pm
	Submission 3 – 31 st March 2025 1.00pm
Submission	Assessment Dropbox in the Module Study Area in
SUDINISSION	CampusMoodle.
Word Limit	1000
Use of Generative Artificial Intelligence (AI) text	IS / IS NOT authorised Delete as appropriate.
Module Co-ordinator	Janani Harischandra

What knowledge and/or skills will I develop by undertaking the assessment?

Describe the knowledge and/or skills that students will develop by undertaking the assessment.

- Gain knowledge on the web client-side technologies HTML, CSS, XML and Java Scripts ES6 and report writing.
- Understand the importance of user experience in web design and development.

On successful completion of the assessment students will be able to achieve the following Learning Outcomes:

What knowledge and/or skills will I develop by undertaking the assessment?

- 1 Describe web application architectures and organisation of websites.
- 2 Apply programming techniques for interactive web application development.
- 3 Apply user experience design methods for interactive web applications.
- 4 Implement an integrated web-based solution, including a range of web technologies and data sources, for a real-world problem.

Please also refer to the Module Descriptor, available from the module Moodle study area.

What is expected of me in this assessment?

Task(s) - content

Select a **ONE** of the case studies below to work on the assignment.

Task (A)

• Create low fidelity wireframes for <u>TWO</u> web pages using Figma/Visio Figma Wireframe Tutorial for Beginners (2025)

Task (B)

• Design the above selected **TWO** web pages using HTML and CSS refer to **Styling Guidelines**

Task (C) - Website Development

Case Studies

1. Personal Portfolio Website

Description: Create a personal portfolio website

- A homepage with an interactive navigation bar displaying projects section displaying examples of work.
- A contact form using JavaScript validation.
- An image slider developed using JavaScript to display images of the projects carried out.
- Integrate XML to organize project data or store blog posts.
- Incorporate UX/UI principles such as clear typography, color contrast, intuitive navigation, web accessibility techniques.

2. Restaurant Menu Website

Description: Design a restaurant website.

- A homepage with an interactive navigation bar displaying a menu section displaying the different menus.
- An order form to order the food items with JavaScript validation.
- Dynamic interaction using JavaScript to filter the menu items by category (e.g., appetizers, mains, desserts).
- Integrate XML to represent review of menu items (e.g. ingredients, prices, descriptions).

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What is expected of me in this assessment?

• Incorporate UX/UI principles such as clear typography, color contrast, intuitive navigation, web accessibility techniques.

3. E-Commerce Product Page

Description: Design an e-commerce website for an online store.

- A home page with an interactive navigation bar (images, products, prices).
- Design a shopping cart form with JavaScript validation (checkout form with personal details, card details etc).
- Use JavaScript to dynamically update the shopping cart details when items are added.
- Integrate XML to store product reviews and render it on the page dynamically.
- Incorporate UX/UI principles such as clear typography, color contrast, intuitive navigation, web accessibility techniques.

4. Event Booking System

Description: Design a website for booking events such as concerts, movies, or conferences.

- A home page with an interactive navigation bar displaying available events with booking details.
- Design an event booking form with JavaScript validation.
- Include JavaScript for event filtering (e.g., by date, location).
- Integrate XML to display past event data (e.g., dates, location, price).
- Incorporate UX/UI principles such as clear typography, color contrast, intuitive navigation, web accessibility techniques.

5. Bookstore Application

Description: Design a bookstore website.

- A homepage with an interactive navigation bar displaying sections like "Categories," "Best Sellers," "New Arrivals".
- An order form to purchase books with JavaScript validation.
- Dynamic interaction using JavaScript to filter books by category (e.g., Fiction, Non-Fiction, Children's Books) and sort by price or popularity.
- Integrate XML to represent reviews of books (title, author, rating, review text) and dynamically display them on book pages.
- Incorporate UX/UI principles such as clear typography, color contrast, intuitive navigation, web accessibility techniques.

Styling Guidelines

- Global CSS file provided for the website to maintain a consistent style. Additional styles
 specific to this page should be created as either an additional external CSS file, or internal
 CSS within the page.
- The home page should be designed in a way that the user can access several parts of the web site with website logo and name. Feel free to use royalty free websites to find a suitable logo (https://www.istockphoto.com/) but reference your resources.

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What is expected of me in this assessment?

• The links on the home page should look like buttons and have a hover effect. This should be implemented using CSS.

Form Design and JavaScript Validation

- The form should contain at least **SIX** different types of form elements suitable for the chosen context (eg: Text fields, text area, radio buttons, check boxes, email, password etc)
- Styled using proper CSS
- Mandatory field validation for user inputs chosen for any **THREE** selected form elements with suitable success message using Java Script upon successful form submission (HTML 5 validations cannot be used- if used zero marks will be awarded)

Java Script Functionality

• The filtering tasks should work for more than **TWO** options

XML integration

A well-formed XML file should used to display the given information and render on the browser using JavaScript

HTML Page Validation

• All pages should be validated with no errors. Warnings are acceptable. Provide evidence that all your pages have been validated successfully in the report. Include screenshots or reports from the validation tool to demonstrate compliance with web standards. Provide those in the Validation page in the report.

Individual Report:

The student must submit a detailed report documenting the implementation of their assigned tasks justifying your design choices with evidence where appropriate using the below given tools. The evaluation of the developed website will be carried in the self-reflection section of the report. The following UX Principles must be implemented and will be marked from the evidence provided in your report with Justifications.

- Introduction
- Technical Discussion of the Java Script functionality, JavaScript validations
- Navigation techniques
- Colour balance/Selection (appropriateness justified through colour contrast test)
- Typography (font style/size appropriateness justified)
- Accessibility Techniques (Text, Tables, Forms, Images)
- Accessibility test report
- Validation reports for **TWO** web pages
- Self-Reflection challenges, solutions, minutes of the tutor feedback for the UI design explaining the pre-post refinements
- References use Harvard referencing style

WAVE (Web Accessibility Evaluation Tool), a free, user-friendly tool that provides visual feedback on accessibility issues directly on your web page. It highlights errors, contrast issues, and structural problems, helping you address them effectively.

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What is expected of me in this assessment?

<u>axe Accessibility Checker</u>, a free browser extension for Chrome and Firefox that integrates seamlessly into your workflow. It offers detailed insights into accessibility issues, prioritizing them based on severity and providing clear solutions.

In-Class Demonstration:

You are expected to deliver a compulsory live [15mins] demo of your web site.

Task(s) - format

Coursework submission guideline

Submission 1 - Low fidelity wire frames (designed using Figma/Visio)

1. Single PDF file with images of the web pages submit via Campus Moodle

Submission 2 – User Interface designed with HTML & CSS

1. Single PDF file with images of the two web pages submit via Campus Moodle

Submission 3 - Final complete submission

1.A complete integrated Web Application of the student work with source code (HTML, JavaScript, XML, CSS) zipped as a separate file + a single PDF report submitted electronically via Campus Moodle.

2. The report and the zipped file should be named with your name eg: RGUStuNO.

How will I be graded?

A number of subgrades will be provided for each criterion on the feedback grid which is specific to the assessment.

The overall grade for the assessment will be calculated using the algorithm below*. [Amend as appropriate to your module.]

Α	At least 50% of the subgrades to be at Grade A, at least 75% of the subgrades to be at Grade B or better, and normally 100% of the subgrades to be at Grade C or better.
В	At least 50% of the subgrades to be at Grade B or better, at least 75% of the subgrades to be at Grade C or better, and normally 100% of the subgrades to be at Grade D or better.
С	At least 50% of the subgrades to be at Grade C or better, and at least 75% of the subgrades to be at Grade D or better.
D	At least 50% of the subgrades to be at Grade D or better, and at least 75% of the subgrades to be at Grade E or better.

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How	How will I be graded?				
E	At least 50% of the subgrades to be at Grade E or better.				
F	Failing to achieve at least 50% of the subgrades to be at Grade E or better.				
NS	Non-submission.				

^{*}If the word count is above the specified word limit by more than 10% or the submission contains an excessive use of text within tables, the grade for the submission will be reduced to the next lowest grade.

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Feedback grid

GRADE	Α	В	С	D	E	F
DEFINITION /	EXCELLENT	COMMENDABLE/VERY GOOD	GOOD	SATISFACTORY	BORDERLINE FAIL	UNSATISFACTORY
CRITERIA	Outstanding	Meritorious	Highly Competent	Competent		Fail
(WEIGHTING)	Performance	Performance	Performance	Performance		
	Complete and excellent	Complete and very good	Complete and well	Complete Implementation	Incomplete	Incomplete and
	Implementation of the	Implementation of the web	Implementation of the	of the web pages using	Implementation of the	unsatisfactory
	web pages using HTML 5	pages using HTML 5 and CSS	web pages using HTML 5		web pages using HTML 5	implementation of the
	and C55 min Orales With	S	and CSS min 8- rules with	rules with appropriate		web pages with poor
(2	an eye-catching design	design layout having proper	good design layout having		poorly design layout	layout.
(2 subgrades)	layout having proper	navigation bar, logo at the		l	having poorly designed	
	navigation bar, logo at the	top.	least a logo at the top.	least a logo at the top.	navigation bar, at least a	
	top.				logo at the top.	
	Complete and excellent	Complete and very good	Complete and well	Complete implementation	•	Incomplete and
	implementation of HTML	implementation of HTML	implementation of HTML	of HTML form using HTML	•	unsatisfactory
		forms (explicit labels) using			forms using HTML 5 and	implementation of HTML
Form Design and	HTML 5 and nicely	HTML 5 and				forms using HTML 5 and
Java Script	designed/aligned/ styled	designed/aligned/styled using	0 1 1		properties with no Java	designed using some CSS
Vallaation	using CSS (float	proper CSS properties with		ı, .	Script.	properties with no Java
	properties, flex etc) with	having 3 compulsory criteria	least 2 compulsory	least 1 compulsory		Script validations.
(2 subgrades)	having 3 compulsory	validation implemented using	criteria validation	criteria validation		
	criteria validation	JavaScript.	implemented using	implemented using		
	implemented using		JavaScript.	JavaScript.		
	JavaScript.					
	Complete and excellent	Complete and very good	Complete and well	Complete implementation	•	Incomplete and
	implementation of the	implementation of the	implementation of the	of JavaScript Functionality	•	unsatisfactory of
	JavaScript Functionality	JavaScript Functionality	JavaScript Functionality	_	JavaScript Functionality	implementation of
_	working with well	working with well	working with fairly			JavaScript Functionality
(1 subgrade)	commented, indented	commented, indented and	commented, indented		indented, and clear code	with no working
	and clear code with no	clear code with minor error or				functionalities.
	errors.	2 accepted.	error or 2 accepted and 1		detected.	
1			major error accepted.			

GRADE	Α	В	С	D	E	F
DEFINITION /	EXCELLENT	COMMENDABLE/VERY GOOD	GOOD	SATISFACTORY	BORDERLINE FAIL	UNSATISFACTORY
CRITERIA	Outstanding	Meritorious	Highly Competent	Competent		Fail
(WEIGHTING)	Performance	Performance	Performance	Performance		
XML file integration (1 subgrade)	complying to 8 well- formed rules.	implementation of the XML file creation complying to 8 well-formed rules.	Complete and well implementation of the XML file creation complying to at least 5 well-formed rules.	complying to at least 4well-formed rules.	implementation of the XML file with no well- formed rules.	Incomplete and unsatisfactory of implementation of XML file creation.
of UI/UX principles in web pages	techniques (image, tables, forms) added in the HTML pages, consistency of the website achieved through CSS min – 8 rules, appropriate colour	implementation of the HTML web accessibility techniques (image, tables, forms – at least 2 of them) added in the HTML pages, consistency of the website achieved through CSS min- 8 rules, appropriate colour selection, typography and iconography used.	forms – at least 1 of them) added in the HTML pages, consistency of the website achieved through CSS –	Implementation of the HTML web accessibility techniques (image, tables, forms – at least 1 of them) added in the HTML pages, some consistency of the website achieved through CSS less than min rules,	forms added in the HTML pages, consistency is achieved barley and lack of appropriate colour selection, typography and iconography used.	Very limited and poor implementation of HTML web accessibility techniques and no consistency is achieved barley and lack of appropriate colour selection, typography and iconography used.
Demonstration (1 subgrades)	explanations with justifications and confidence.	Presented well with less justifications and explanations.	Presented moderately well the adequate explanations.	Presented with unclear explanations.	Did not present, nor explanation given	Did not present, nor explanation given
	Note**: If the student was	absent for the live viva demon	stration, the entire modul	e grade will be marked as '	'NS"	

GRADE	Α	В	С	D	E	F
DEFINITION /	EXCELLENT	COMMENDABLE/VERY GOOD	GOOD	SATISFACTORY	BORDERLINE FAIL	UNSATISFACTORY
CRITERIA	Outstanding	Meritorious	Highly Competent	Competent		Fail
(WEIGHTING)	Performance	Performance	Performance	Performance		
Report (2 subgrade)	Performance Complete and excellent report, covering sections - Introduction, technical discussion, challenges and solutions with tutor feedback, very good explanation of code snippets, navigation techniques used. justification for colour, typography selection and evidence of 3 accessibility techniques used with colour and accessibility test reports with proper reference style and validation reports.	Complete and very good report, covering sections – Introduction, technical discussion including at least challenges or and solutions, tutor feedback, good explanation of code snippets, navigation techniques used. justification for colour, typography selection and evidence of 3 accessibility techniques used with colour and accessibility test reports with proper reference style and validation reports.	Complete and well report, covering sections – Introduction, technical discussion including at least challenges or and solutions, tutor feedback, fair explanation of code snippets, navigation techniques used. justification for colour, typography selection and evidence of at least 2 accessibility techniques used with colour and accessibility test reports with proper reference style and validation reports.	Complete report, covering sections – Introduction, technical discussion including at least challenges or and solutions, some tutor feedback, some explanation of code snippets, navigation techniques used. justification for colour, typography selection and evidence of at least 1 accessibility techniques used with at least colour or accessibility test reports with some	less information in Introduction, technical discussion with no proper details of challenges or solutions, no tutor feedback, no explanation of code snippets, navigation techniques used. Poor justification for colour, typography selection and evidence of at least 1 accessibility techniques used with at least colour or accessibility test reports	Poor report presentation with less information in Introduction, technical discussion with no proper details of challenges or solutions, no tutor feedback, no explanation of code snippets, navigation techniques used. No justification for colour, typography selection and evidence of no accessibility techniques used, no test report or no validation reports or references added.

Coursework received late, without valid reason, will be regarded as a non-submission (NS) and one of your assessment opportunities will be lost.



What else is important to my assessment?

What is the Assessment Word Limit Statement?

It is important that you adhere to the Word Limit specified above. The Assessment Word Limit Statement can be found in Appendix 2 of the <u>RGU Assessment Policy</u>. It provides detail on the purpose, setting and implementation of wordage limits; lists what is included and excluded from the word count; and the penalty for exceeding the word count.

What's included in the word count?

The table below lists the constituent parts which are included and excluded from the word limit of a Coursework; more detail can be found in the full Assessment Word Limit Statement. Images will not be allowed as a mechanism to circumvent the word count.

Excluded	Included			
Cover or Title Page	Main Text e.g. Introduction, Literature Review, Methodology, Results, Discussion, Analysis, Conclusions, and Recommendations			
Executive Summary (Reports) or Abstract	Headings and subheadings			
Contents Page	In-text citations			
List of Abbreviations and/or List of Acronyms	Footnotes (relating to in-text footnote numbers)			
List of Tables and/or List of Figures	Quotes and quotations written within ""			
Tables – mainly numeric content	Tables – mainly text content			
Figures				
Reference List and/or Bibliography				
Appendices				
Glossary				

What are the penalties?

The grade for the submission will be reduced to the next lowest grade if:

- The word count of submitted work is above the specified word limit by more than 10%.
- The submission contains an excessive use of text within Tables or Footnotes.

What else is important to my assessment?

What is plagiarism?

Plagiarism is "the practice of presenting the thoughts, writings or other output of another or others as original, without acknowledgement of their source(s) at the point of their use in the student's work. All materials including text, data, diagrams or other illustrations used to support a piece of work, whether from a printed publication or from electronic media, should be appropriately identified and referenced and should not normally be copied directly unless as an acknowledged quotation. Text, opinions or ideas translated into the words of the individual student should in all cases acknowledge the original source" (RGU 2022).

What is collusion?

"Collusion is defined as two or more people working together with the intention of deceiving another. Within the academic environment this can occur when students work with others on an assignment, or part of an assignment, that is intended to be completed separately" (RGU 2022).

For further information please see Academic Integrity.

What if I'm unable to submit?

- The University operates a <u>Fit to Sit Policy</u> which means that if you undertake an assessment then you are declaring yourself well enough to do so.
- If you require an extension, you should complete and submit a <u>Coursework Extension Form</u>. This form is available on the RGU <u>Student and Applicant Forms</u> page.
- Further support is available from your Course Leader.

What additional support is available?

- RGU Study Skills provide advice and guidance on academic writing, study skills, maths and statistics and basic IT.
- RGU Library guidance on referencing and citing.
- The Inclusion Centre: Disability & Dyslexia.
- Your Module Coordinator, Course Leader and designated Personal Tutor can also provide support.

What are the University rules on assessment?

The University Regulation 'A4: Assessment and Recommendations of Assessment Boards' sets out important information about assessment and how it is conducted across the University.

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