

Web Design and Development

Release Date:

Submission Date: Saturday 19th Dec 2020

Project Weighting: 60%

IMPORTANT: It is your responsibility to avoid plagiarism. Please read the guidelines on academic honesty and integrity and [how to avoid plagiarism](#) made available by the NCI library.

NOTE: You are not permitted to publish this assignment brief on any websites. You are not permitted to publish/share your solution with others.

Project Description:

You are required to develop a website for a business customer. An example would be a website for a local service such as community group, taxi, hairdresser, barber, craft, artist, small business. You are not limited to these ideas. The project will be completed as part of a team, using Notepad++ for code and Word for the report.

Overview:

- This assignment is project-based and each project group will have 3 participants.
- There will be a report and the website files.
- Each group will complete a **project report**. The report will include the following:
 - The requirements as if gathered from the client.
 - The wireframe designs for each webpage based on the requirements.
 - All team members should be listed in your report.
 - List of what each team member did in the project.
 - A coding challenge encountered by each team member and how it was solved.
 - Information on how well you worked as a team.
 - Report to include a paragraph on how your website meets web standards
 - Wordcount to be between 600-900 word

Details

You have been assigned as web developer for a new business.

Create the 4 web pages outlined below and at least one more. To include:

1. Landing page with image and essential details, navigation, logo, title etc
2. Contact page should contain contact details for the restaurant as well as a dummy contact form. This contact form should implement some form validation and should take in the following details (all mandatory): Name, Phone number, Email, Message
3. Page with a gallery of images incorporated.
The gallery should be produced in a thumbnail format where users click on small images which are then shown in a larger format. No more than 8 images.
4. Page that incorporates a javascript minigame for visitors to play.
The game may be designed in your Problem Solving and Programming Concepts module. It will be developed using JavaScript in this module.
It must include an element of randomisation.
5. Javascript to demonstrate manipulation of the DOM.

Website will include the following:

- Files must be formatted correctly and commented.
- Comments to show who did what work in the code.
- Website must be responsive.
- Website must be deployed online, any deployment service may be used however here are some free examples.
 - Github pages
 - Gearhost
- Website should be tested using the validator and then optimised using [Google Page Speed](#) (requires deployment). Results of pre and post-tests should be captured.
- Images should be optimised for the website.

Uploading

Students must submit the following via Moodle

- **Zipped** file including all HTML, CSS and JS code and images
- Word doc containing:
 - Link to deployed website
 - Link to github with code
 - Link to video presentation
 - Report

Students must submit a video demoing their website and addressing each section of the grading rubric (see table below). A video presentation should last no more than 10 minutes and will consist of a screen capture and voiceover of the website and the results of the testing. Students should add any other details they feel are relevant.

Screen captures may be completed using any tool however videos must be deployed to Microsoft Streams in mp4 format. Details of how to use Stream and submit are found here: <https://web.microsoftstream.com/video/53baa13d-27d1-4985-a7bc-7618705f803b>

Here are some example technologies that may be used to screen record:

- Snagit
- Windows Game Bar
- Filmora
- Screencast-o-matic
- OBS
- Loom

Scroll further for the marking rubric ↓↓ ↓ ↓ ↓ ↓ ↓ ↓

	80+	70-79	60-69	50-59	40-49	0-39
Responsive (15%)	Website is responsive with no visual errors using a responsive framework with extensive customisation.	Website is responsive with no visual errors using a responsive framework with some customisation.	Website is responsive with no visual errors using a responsive framework with no customisation.	Website is responsive but with some visual errors.	Website is responsive but with many visual errors.	Website is not responsive.
Image gallery (10%)	Gallery is visually appealing and has advanced functionality AND Images are optimised.	Gallery is visually appealing and has required functionality AND Images are optimised.	Gallery is visually appealing and has basic functionality AND Images are optimised.	Gallery is visually appealing and either has no functionality OR Images are not optimised.	Gallery is visually appealing and has no functionality. Images are not optimised.	Gallery is visually unappealing and has no functionality. Images are not optimised.
Contact (10%)	Contact form with validation using JavaScript and HTML5. Visually appealing and clear to users.	Contact form with validation using JavaScript and HTML5..	Contact form with some basic validation using JavaScript.	Contact form with some basic validation using HTML 5.	Contact form with little or no validation.	No contact form.
JavaScript implementation (25%)	All required functionality implemented and working. Visually appealing and easy to use.	Most of the required functionality implemented and working. Visually appealing and easy to use.	Most of the required functionality implemented. Visually unappealing or difficult to use.	Some basic functionality or functionality with errors.	Minimal javascript.	No javascript.
Deployment (10%)	Website is deployed online with excellent file structure and pathnames.	Website is deployed online with excellent file structure and pathnames.	Website is deployed online however has a poor file structure OR pathnames.	Website is deployed online however has a poor file structure AND pathnames.	Website is deployed online however has some deployment related errors (404, images not showing etc).	Website is not deployed online.
Testing and optimisation (10%)	Website tested with the HTML and CSS validator with excellent result. Optimised via Google Page Speed rankings – excellent result.	Website tested with the HTML and CSS validator with good result. Optimised via Google Page Speed rankings – good result.	Website tested with the HTML and CSS validator with adequate result. Optimised via Google Page Speed rankings – adequate result.	Website tested with the HTML and CSS validator with poor result. Optimised via Google Page Speed rankings – poor result.	Website shows little evidence of testing or optimisation.	Website shows no evidence of testing or optimisation.
Planning, formatting, wireframes, commenting of code (10%)	Excellent evidence of planning, requirements, wireframing, formatting and commenting of code.	Good evidence of planning, requirements, wireframing, formatting and commenting of code.	evidence of planning, requirements, wireframing, formatting and commenting of code.	Adequate evidence of planning, requirements, wireframing, formatting and commenting of code.	Very poor effort of planning, minimal formatting and commenting.	None.
Effort (10%)	This final section is based on the examiner's discretion. Learners who score well here will have gone beyond the scope of the project document, will discuss testing and design decisions, and will have presented their video overview excellently.					