

Front-End Web Development Hackathon

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Requirements Information Session

Requirements

- **LO1** Design a static Front-End web application using HTML and CSS based on the principles of user experience design, accessibility and responsivity
- **LO2** Test a Front-End web application through the development, implementation and deployment stages
- LO3 Deploy a Front-End web application to a Cloud platform
- LO4 Maximise future maintainability through documentation, code structure and organisation
- **LO5** Demonstrate and document the development process through a version control system such as GitHub
- LO6 Use an Agile methodology to plan and design a Front End Web application

Full list of Requirements



LO1

Design a Front end web application based on the principles of user experience design, accessibility and responsivity

LO1.1 Design a website that incorporates a main navigation menu and a structured layout

- Ensure the user knows which page they are at
- Have your branding in place
- Make sure all links are working as they should
- Ensure style consistency across the site

LO1.2 Design a website that meets accessibility guidelines (e.g. contrast between background and foreground colours, non-text elements have planned alternative text equivalents to cater for the visually impaired).

- Give appropriate alternative (alt) text for all images
- Test your contrast ratio
- Your font style should be legible
- Consider appropriate color scheme for the purpose of your site

LO1.3 Design the organisation of information on the page following the principles of user experience design (headers are used to convey structure, information is easy to find due to being presented and categorised in terms of priority)

- Ensure user knows the purpose of the site at first glance
- Break the content down into readable parts
- Any interactions expected from the user should be clearly understood and followed
- Ensure that navigating is intuitive

LO1.4 Ensure that foreground information is never distracted by backgrounds

- Text should be legible, background color or image should not distract from the content
- Color scheme should not distract or affect the legibility
- Subtle use of CSS animations, appropriate to the need

LO1.5 Include graphics that are consistent in style and colour

- Ensure that images and graphics are consistent in size
- Color scheme is followed with regards to graphics
- There should be overall consistency across the site

LO1.6 Design the site to allow the user to initiate and control actions such as the playing of audio/video.

- If a video is used, it should not autoplay. User should be able to choose whether or not the video plays
- Ensure responsiveness of the iframe across the screens
- If audio is used, user should be able to control whether or not it plays

LO2

Test a Front-End web application through the development, implementation and deployment stages

Create a website of at least three pages, or (if using a single scrolling page) at least three separate page areas to match the design and to meet its stated purpose

- Consider coding them so they are not identical across three, they should differ from one another
- Ensure your pages have clear purpose, in addition to the structured design of the usual (Navbar, Footer, etc)

LO2.2 Write custom HTML code that passes through the official W3C validator with no issues.

Resource:

- https://jigsaw.w3.org/css-validator

Tip:

- Clear all errors
- Try not leaving any warnings in

LO2.3 Write custom CSS code that passes through the official (Jigsaw) validator with no issues

Resource:

https://validator.w3.org/

Tip:

- Clear all errors
- If possible, clear all warnings

LO2.4 Incorporate images that are of sufficient resolution to not appear pixelated or stretched

Tips:

- Ensure images are of excellent quality
- Use CSS to ensure responsiveness

LO2.5 Code all external links to open in a separate tab when clicked

LO2.6 Use CSS media queries across the application to ensure the layout changes appropriately and maintains the page's structural integrity across device screen sizes.

 When testing the responsiveness of your site, ensure to check on all screen sizes, use DevTools to see how your site displays across different devices

LO2.7

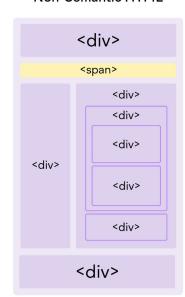
Use Semantic markup to structure HTML code

 Ensure your site is structured as appropriate

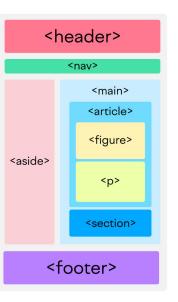


What Is Semantic HTML?

Non-Semantic HTML



Semantic HTML



semrush.com SEMRUSH

LO2.8 Present the finished website with clearly understandable site-specific content, rather than Lorem Ipsum placeholder text

- Even if using fictional information, make it looking as finished as possible
- Do not use Lorem Ipsum
- All content included on the site should be relevant to the project's purpose as much as possible

LO2.9 Implement clear navigation to allow users to find resources on the site intuitively.

Useful resource:

The Essential Guide to Website Navigation
Website Navigation Best Practices

LO3

Deploy a Front-End web application to a Cloud platform

LO3.1 Deploy a final version of the code to a cloud-based hosting platform (e.g. GitHub Pages) and test to ensure it matches the development version:

- Project 1 will be deployed to Github Pages, similarly to Love Running

LO3.2 Use Git & GitHub for version control of an interactive web application up to deployment.

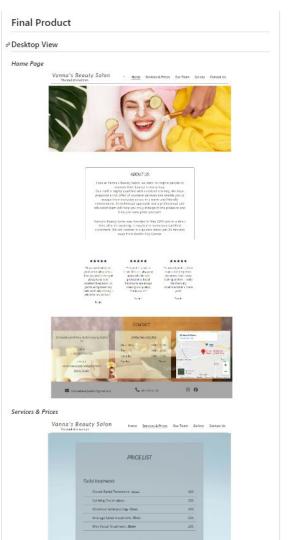
LO3.3 Remove commented-out code before pushing final changes to version control and deploying:

- No commented-out code is allowed on submitted project

LO3.4 Ensure that there are no broken internal links:

- Ensure to test manually all features and links of your site

LO3.5 Insert screenshots of the finished project in the README



LO4

Maximise future maintainability through documentation, code structure and organisation

LO4.1 Write a README.md file for the web application that explains its purpose, the value that it provides to its users, and the deployment procedure.

 The deployment procedure should be a thorough step by step on how the deployment is performed, so revise how it is done in walkthrough and take down the steps you apply to your own project LO4.2

Insert screenshots of the project features, give a brief description of what each feature does and explain its value to the user.

Features

Existing Features

- F01 Navigation Bar
 - The navigation bar has a consistent look and placement on all three pages of the website supporting easy navigation. It includes a simple Logo, Home page. Menu and Contact links and is responsive on multiple screen sizes. On small screens (e.g., mobile devices) the Home, Menu and Contact links move to under the



Home Menu Contact

- . F02 Landing Page image and call to action
 - The landing area includes a photograph and a text overlay that together clearly identify the purpose of the business and the type of product it sells. The citrus colours and 'welcome' message are intended to be appealing to the user and convey a sense of health, freshness and friendliness.
 - A large bright "See Our Menu" button is placed central to the screen as an eye-catching call to action which gives the user an obvious guick route to the menu page.



- The "enjoy here or takeaway the choice is yours" tagline appears on the main page and again on the menu. page to let the user know that seating is available and to help re-inforce consistency in branding.

ENJOY HERE OR TAKEAWAY - THE CHOICE IS YOURS

- F04 Company Ideals section
 - The company ideals are presented using 4 flip cards below the tagline on the main page. These cards give the user more information about the organisation in relation to its strategy in the areas of quality, sourcing of ingredients, recycling and philanthropy.

LO4.3 Attribute all code from external sources to its original source via comments above the code and (for larger dependencies) in the README.

Tip: Be transparent about any resources used in your project. Ensure to include it in comments, if a particular code was used, or in README if you've used something for research purposes

LO4.4 Clearly separate and identify code written for the website and code from external sources (e.g. libraries or tutorials):

 Be transparent about each piece of code that was borrowed from an external source, utilise comments and include the source in Reference section on README

LO4.5 Organise HTML and CSS code into well-defined and commented sections:

- Utilise comments to describe features or anything else you would like to communicate
- Organise your code

LO4.6 Place CSS code in external files linked to the HTML page in the HEAD element.

Write code that meets at least minimum standards for readability (consistent indentation, blank lines only appear individually or, at most, in pairs):

- Utilise Beautifier to format your code as necessary
- Ensure consistency

LO4.8 Name files consistently and descriptively, without spaces or capitalisation to allow for cross-platform compatibility.

Group files in directories by file type (e.g. an *assets* directory will contain all static files and may be organised into sub-directories such as *CSS*, *images*, etc.)

- Ensure to sort the files by the file type and into relevant folders
- Keep the directory structure simple and easy to navigate

LO5

Demonstrate and document the development process through a version control system such as GitHub

LO5.1 Use consistent and effective markdown formatting to produce a README file that is well-structured, easy to follow, and has few grammatical errors

Useful resources:

- Markdown-cheatsheet

LO6

Use an Agile methodology to plan and design a Front End Web application

LO6.1 Use an Agile tool to manage the planning and implementation of all significant functionality

LO6.2 Document and implement all User Stories and map them to the project within an Agile tool