**Gooseberry Kitchen**

A menu of food on a table

AI-generated content may be incorrect.

<https://hwzieba.github.io/webdesign/>

Roisin Kelly (25145347),  
Connor Vogelaar (25111329),   
Hubert Zieba (24110892)

06-12-2025

Table of Contents

[1. Executive Summary 1](#_Toc215933775)

[2. Project Work 1](#_Toc215933776)

[3. Design Process 1](#_Toc215933777)

[3.1 Colour palette 1](#_Toc215933778)

[3.2 Layout 2](#_Toc215933779)

[4. Testing & Responsiveness 7](#_Toc215933780)

[4.1 JavaScript 7](#_Toc215933781)

[4.2 Testing 8](#_Toc215933782)

[4.3 Optimisation 10](#_Toc215933783)

[4.4 SEO 11](#_Toc215933784)

[5. Conclusion 11](#_Toc215933785)

[6. References 13](#_Toc215933786)

# Executive Summary

We chose this website for our project as Connor’s girlfriend is starting a small catering business called ‘Gooseberry Kitchen’. Her goal is to sell home cooked food locally around the Dublin area to about 20 clients every week. She has done market research and found that there is strong interest in a meal delivery service, especially among young parents who work full time. Lots of this demographic love quality, home cooked food, but lack the time and energy to prepare it themselves.

She wanted a website to show her legitimacy and build trust with potential clients. The website should reflect her vision of a cosy, friendly service that offer great quality at reasonable prices. The website should show potential clients information about her, provide a menu that can be updated as needed, and allow them to contact her if they are interested in ordering her menu items. It was important that the website looked warm and inviting, while also being clear and easy to navigate.

We wanted to build a clean, visually appealing website that matched the brief provided and responded well to different screen sizes. We made sure the website design is consistent across all pages and included plenty of photos showcase her cooking. We also made it so the website can be updated easily, which allows for menu items to be changed as needed.

# Project Work

The project team split the work into 4 sections, individual responsibility and shared responsibility as follows:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | HTML | CSS | JavaScript | Other |
| Connor Vogelaar | menu.html | connorstylesheet.css | menu.js | Point of contact for Gooseberry Kitchen |
| Hubert Zieba | about.html  index.html | hubertstylesheet.css | slideshow.js  zoomin.js | Layout, Bootstrap |
| Roisin Kelly | contact.html | roisinstylesheet.css | contactforminputvalidation.js | Bootstrap, Form |
| Shared |  | style.css | script.js | Report Document, |

# Design Process

## Colour palette

The client provided us with the following colour palettes as inspiration for the website. They wanted a warm, autumnal feel and a sleek and simple design.

A close-up of a color palette

AI-generated content may be incorrect. A color palette of different shades of brown and orange

AI-generated content may be incorrect.

## Layout

In order to keep the site clean and simple, we decided on a layout with the large logo on the left of the page along with the navigation buttons, and the main content on the right-hand side of the page. We tested several different layouts, and we agreed that this one fit the brief the best.

All conceptual images used in this section were created with the free version of Canva. These visuals illustrate the design process; however, they were prepared retrospectively, once the core development work had been completed. In practice, the design process was carried out directly through HTML and CSS.

We began with a simple initial structure consisting of four HTML files (Main, About, Menu and Contact), each linked through a basic navigation menu, along with an empty CSS stylesheet and an empty JavaScript file. Hubert added extensive comments to these files to make it easier to divide the workload. Later, Roisin refined the file structure and naming conventions, and separated the styling into three individual stylesheets (one for each team member), in addition to a shared main stylesheet used for common styles. Connor provided all text content and images, including the logo, and consulted the styles and colour palette with the business owner.

We agreed that each team member would take responsibility for designing one page: Roisin worked on the Contact page, Connor on the Menu page, and I focused on the About page. While each person designed their assigned page independently, we had to ensure a consistent visual style across the entire site.

Our first wireframe (Fig. 3.2.1) featured a simple layout: a top navigation bar with the logo, and a single-column content area below. Early in development we encountered a font compatibility issue—the chosen font displayed as Comic Sans on Windows browsers (Fig. 3.2.2), so we replaced it.

Obraz zawierający zrzut ekranu, tekst, Urządzenie domowe, urządzenie

Zawartość wygenerowana przez AI może być niepoprawna.

Fig. 3.2.1. Initial wireframe layout.

Obraz zawierający tekst, zrzut ekranu, Czcionka

Zawartość wygenerowana przez AI może być niepoprawna.

Fig. 3.2.2. Font compatibility issue.

Hubert initially struggled with organising the content for the About section, as it needed to include two separate blocks of text: one describing the business and one describing the entrepreneur. He planned to include a slideshow of dishes, as well as a separate photo of the business owner, but could not decide which element to prioritise visually. Before discussing this with the team, he experimented with various layouts. He first tried dividing the page into two columns (Fig. 3.2.3), but the results, although promising, were ultimately unsatisfactory (Fig. 3.2.4).

Obraz zawierający tekst, zrzut ekranu, urządzenie, Urządzenie domowe

Zawartość wygenerowana przez AI może być niepoprawna.

Fig 3. Two-column wireframe experiment.

Obraz zawierający tekst, jedzenie, menu

Zawartość wygenerowana przez AI może być niepoprawna.

Fig. 3.2.4. Screenshot of two-column prototype.

He also tested a circular text-box design using a 50% border radius (Fig. 3.2.5). While visually interesting, this approach presented unresolved issues regarding text flow, capacity and scroll behaviour (Fig. 3.2.6).

Obraz zawierający zrzut ekranu, tekst, krąg, design

Zawartość wygenerowana przez AI może być niepoprawna.

Fig. 3.2.5. Circular text-box wireframe.

Obraz zawierający tekst, menu, jedzenie, warzywo

Zawartość wygenerowana przez AI może być niepoprawna.

Fig. 3.2.6. Screenshot of circular text-box prototype.

Eventually, he decided to split the content into two separate pages: Main (focused on the business) and About (focused on the entrepreneur). He then developed a responsive two-column layout, with navigation on the left and content on the right, collapsing into a single column on smaller screens (Fig. 3.2.7). He implemented this design using CSS and presented it to the team, who approved it. Roisin then adapted it for the remaining pages.

Obraz zawierający zrzut ekranu, tekst, numer, Prostokąt

Zawartość wygenerowana przez AI może być niepoprawna.

Fig. 3.2.7. Responsive two-column wireframe.

Although the layout functioned well (Fig. 3.2.8), we discussed the possibility of incorporating Bootstrap to streamline layout consistency.

Obraz zawierający tekst, menu, jedzenie

Zawartość wygenerowana przez AI może być niepoprawna.

Fig. 3.2.8. Screenshot of early responsive layout implementation

Final version of the responsive layout is based on Bootstrap, designed with the help of the official documentation, with styles customized to our customer’s needs. It also contains Bootstrap Icons – implemented as instructed on the official Bootstrap website.

# Testing & Responsiveness

Talk about website responsiveness here along with **Optimisation, SEO and Testing**. You can talk about how you made your website responsive. You could also mention how you used JavaScript: loops, if statements, etc. How you deployed your website?

# JavaScript

Hubert implemented a JavaScript-based slideshow for the Main page (“The Kitchen”), including a feature that allows users to zoom in on any selected image. Roisin used JavaScript to build the contact form validation, ensuring that all required fields are correctly completed before submission. Connor applied JavaScript to create an accordion component for the Menu page, allowing menu items to expand and collapse for easier navigation.

The slideshow script uses a for loop to iterate through all <div> elements with the slides class, adding or removing the active class to control which image is visible. An if statement is used to reset the slide index, allowing the slideshow to loop continuously.

The zoom-in feature works by creating a modal window in which the selected image is displayed in full-screen mode. To exit that mode, the user has to click anywhere.

The contact form submission functionality is where each input field is checked if they are empty and for the phone number it is validated to not allow values that are not numbers. If any of the inputs are not valid an error modal and a specific error message is shown. If the inputs are valid, a success modal is shown with a success message and the page is altered to hide the form input, form button and an information message above the form and display a thank you message.

Connor used JavaScript to create an accordion feature on the Menu page. Each menu section can be opened or closed by clicking on the heading, which makes the page easier to navigate and avoids clutter. The script waits for clicks on the headings, uses if-statements to check if a section is open or not, then adds or removes a CSS class to open or close the relevant sections. Its also updates the “+” and “-“ icons so the user can see which section is active.

# Testing

We have validated our HTML and CSS files using tools available on the W3.org website:

* the W3C Markup Validation Service, and
* the W3C CSS Validation Service.

The most common error was missing ‘alt’ attributes in <img> elements (Fig.4.2.1), which can be easily fixed by adding them. This issue appeared on all pages in relation to the logo, and on *The Kitchen* and *About* page (for all images, including the slideshow).

Obraz zawierający tekst, zrzut ekranu, Czcionka, linia

Zawartość wygenerowana przez AI może być niepoprawna.

Fig. 4.2.1. Missing ‘alt’ attribute.

The main page (*The Kitchen*) also contained a missing ‘src’ attribute for one <img> element, but this was a false positive (Fig. 4.2.2), because the element is dynamically added via JavaScript whenever a slide is clicked.

Obraz zawierający tekst, zrzut ekranu, Czcionka, numer

Zawartość wygenerowana przez AI może być niepoprawna.

Fig. 4.2.2. Missing ‘src’ attribute.

The *About* page contained one additional error: a bad value (100%) associated with an <img> element (Fig. 4.2.3). This attribute turned out to be unnecessary in the HTML code and was removed.

Obraz zawierający tekst, zrzut ekranu, Czcionka, linia

Zawartość wygenerowana przez AI może być niepoprawna.

Fig. 4.2.3. Bad value for ‘width’ attribute.

The *Menu* had only the previously mentioned missing ‘alt’ attribute in the logo.

Validation of the *Contact* page returned the following errors:

The aria-labelledby was added when adding the modals for validation and feedback to the user when they submit the form. This issue was easily fixed by removing the attribute and making sure it does not impact the functionality of the modal.

Obraz zawierający tekst, zrzut ekranu, Czcionka, numer

Zawartość wygenerowana przez AI może być niepoprawna.

Fig. 4.2.6. The aria-labelledby caused issue because in a <div> tag there are additional requirements to use it correctly.

The CSS test performed using the W3C CSS Validation Service returned no errors (Fig. 4.2.8).

Obraz zawierający tekst, zrzut ekranu, Czcionka, Strona internetowa

Zawartość wygenerowana przez AI może być niepoprawna.

Fig. 4.2.8. No CSS errors.

# Optimisation

We tested our website using Google PageSpeed Insights, which evaluates performance, accessibility, SEO and best-practice compliance. Our initial performance score was 72, while accessibility scored 89, SEO scored 91, and Best Practice received a perfect 100 (Fig. 4.3.1). These results are strong for a student project that includes many images and several JavaScript features. The high SEO and best-practice scores reflect our clean HTML structure, the use of semantic tags and the responsive layout.

A screenshot of a computer

AI-generated content may be incorrect.A screenshot of a computer

AI-generated content may be incorrect.

Fig. 4.3.1. Initial reports from PageSpeed.

PageSpeed suggested two main improvements for performance: using long-term caching and optimizing images. However, adding a header such as Cache-Control: max-age=31536000 is not possible on GitHub Pages, because users cannot modify server-side settings. The second recommendation—compressing and resizing images—was something we were able to address. We converted the logo from a 1024x1024 PNG of over 1 MB to a 500x500 WebP of around 250 kB using Squoosh, and we optimised all other images as well. Altogether, the total image size dropped from about 30 MB to 8 MB, without any visible loss of quality. This significantly improved loading time and overall performance.

There were also some comments about accessibility, mainly related to low colour contrast. We did not change these elements because the client preferred to keep the chosen colour palette. After finishing the image optimisation, our PageSpeed performance score increased from 72 to 89, showing a clear improvement in speed and efficiency (Fig. 4.3.2).

Obraz zawierający tekst, zrzut ekranu, Strona internetowa, oprogramowanie

Zawartość wygenerowana przez AI może być niepoprawna.

Fig. 4.3.2. Improved performance score.

# SEO

For the SEO improvements, we followed ideas from Google’s SEO Starter Guide. Thanks to GitHub Pages, our site does not display any distracting advertisements, which helps keep the pages clean and easy to navigate. The text is written in a simple, readable way, and the content is unique—we do not copy material from other websites.

We also added important meta data, including title, keywords, and description, for example:

<meta name="description" content="Home-run catering business offering home-cooked meals mixing Irish and other European cuisines">

<meta name="keywords" content="Catering, Dublin, Home-cooked, Irish, European, Meat, Seafood, Sea food">

We included high-quality images in the appropriate sections. The client originally provided low-resolution photos, so we asked for better ones and later optimized them. As mentioned earlier, we added descriptive alt text to all <img> elements to improve accessibility and SEO.

We considered using more descriptive URLs as recommended, but this would require the client to purchase a custom domain. Since this has not been agreed upon yet, we kept the default GitHub Pages URLs for now.

# Conclusion

We feel that the project went very well, and we worked together strongly as a team. Each of us took responsibility for at least one full page, but we also supported one another whenever a problem came up. We divided the workload clearly and met regularly to discuss progress, design choices and any issues that appeared along the way. This good communication helped us keep a consistent layout and visual style across all pages, and the final website feels coherent and professional.

Some parts of the project were more difficult than expected, especially responsiveness, layout consistency and implementing our JavaScript features. Aligning the two main columns on all pages turned out to be more challenging than it first looked. There are slight differences between the dimensions of the right-hand content sections, which makes the centre line on the Menu and Contact pages appear a little bit off when compared to The Kitchen and About pages. This issue even disappears in Developer Mode in Chrome and Firefox, which made it harder to diagnose. We also spent time experimenting with different layouts for the Main and About pages before agreeing on the final structure, but in the end everything works as intended.

We are happy with how the finished website looks. It reflects the warm, cosy and welcoming tone the client wanted, while still being simple to navigate. The site responds well across different screen sizes and includes interactive elements such as the slideshow, zoom feature, contact form validation and menu accordion. If we had more time, we would probably try to fix the remaining alignment issue, and we might also discuss with the client whether the colour palette could be slightly adjusted for better visibility. In the future, additional features—like a full online ordering system or a separate gallery page—could be considered. For the scope of this project, however, we believe the website meets the client’s needs and shows strong teamwork and practical web design skills.

# References

Bootstrap (n.d.) *Columns · Bootstrap v5.3 Documentation.* Available at: <https://getbootstrap.com/docs/5.3/layout/columns/> (Accessed: 26 November 2025).

Bootstrap (n.d.) Bootstrap general. Available at: <https://getbootstrap.com/docs/5.3/> (Accessed: 13-Nov-2025)

Bootstrap (n.d.) *Install Bootstrap Icons*. Available at: https://icons.getbootstrap.com/#install (Accessed: 26 November 2025).

CodeConvey(n.d.) Bootstrap 5 Modal Popup Tutorial: Creating Success & Error Messages. Available at: <https://codeconvey.com/snippet/bootstrap-5-modal-popup-tutorial-creating-success--error-messages-iPAdWOpr> (Accessed: 13-Nov-2025)

GitHub Community (2022) *Cache-Control on GitHub Pages?* Available at: <https://github.com/orgs/community/discussions/11884> (Accessed: 5 December 2025).

Google (2025) *PageSpeed Insights analysis for https://hwzieba.github.io/webdesign/index.html* (desktop). Available at: [https://pagespeed.web.dev/analysis/https-hwzieba-github-io-webdesign-index-html/6qzynp23g1?form\_factor=desktop](https://pagespeed.web.dev/analysis/https-hwzieba-github-io-webdesign-index-html/6qzynp23g1?form_factor=desktop&utm_source=chatgpt.com) (Accessed: 5 December 2025).

Google (2025) *PageSpeed Insights analysis for https://hwzieba.github.io/webdesign/index.html* (desktop). Available at: [https://pagespeed.web.dev/analysis/https-hwzieba-github-io-webdesign-index-html/m1dtvggiwz?form\_factor=desktop](https://pagespeed.web.dev/analysis/https-hwzieba-github-io-webdesign-index-html/m1dtvggiwz?form_factor=desktop&utm_source=chatgpt.com) (Accessed: 5 December 2025).

Google (2025) *PageSpeed Insights*. Available at: <https://pagespeed.web.dev/> (Accessed: 5 December 2025).

Google (2025) *Search Engine Optimization (SEO) Starter Guide*. Available at: <https://developers.google.com/search/docs/fundamentals/seo-starter-guide> (Accessed: 5 December 2025).

Google (n.d.) *PageSpeed* Insights. Available at: <https://pagespeed.web.dev/> (Accessed: 27 November 2025).

Google Chrome Labs (2025) *Squoosh Image Optimization Tool*. Available at: <https://squoosh.app/editor> (Accessed: 5 December 2025).

Mozilla Developer (n.d.) Placeholder css. Available at: [::placeholder - CSS | MDN](https://developer.mozilla.org/en-US/docs/Web/CSS/Reference/Selectors/::placeholder) (Accessed:03-Dec-2025)

W3C (n.d.) *CSS Validation Service*. Available at: <https://jigsaw.w3.org/css-validator/validator.html.en> (Accessed: 27 November 2025).

W3C (n.d.) *Markup Validation Service*. Available at: <https://validator.w3.org> (Accessed: 27 November 2025).

W3Schools (n.d.) Fontawesome Available at: <https://www.w3schools.com/icons/fontawesome_icons_brand.asp/> (Accessed:16-Oct-2025)

W3Schools (n.d.) *How To - Modal Images.* Available at: <https://www.w3schools.com/howto/howto_css_modal_images.asp> (Accessed: 26 November 2025).

W3Schools (n.d.) *How To - Slideshow.* Available at: <https://www.w3schools.com/howto/howto_js_slideshow.asp> (Accessed: 26 November 2025).

W3Schools (n.d.) Icons . Available at: <https://www.w3schools.com/icons/> (Accessed:16-Oct-2025).