



# Higher diploma in science in computing

2024

Web and UI Design

Project 3

Course: CW\_KRSIT\_H

Date: 23/4/24

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## Introduction

In this phase of the project, I built upon the foundations established in Part 2. In that context this document is a supplement to the previous project requirements, which I have included in the same folder under the name "OLD-Project-2-Requirements.pdf"

I developed alternative Figma mock-ups for a new "Blog" page, prioritising key design principles such as balance, white space, alignment, and spacing to enhance visual appeal and usability. On review of the previous "About Us" page, I recognised it had many shortcomings, so I chose to focus the heuristic evaluation on identifying and amending these specific issues.

Additionally, I expanded my technical skills by creating a simple JavaScript game. This was intended to fulfil the project requirements, as well as expanding my understanding of DOM manipulation and CSS animations, by providing a practical application of these techniques. This game can be accessed through the "Blog" page, or at the "/game.html" route.

## Code

The files specified below are the ones which have new source code added in this phase of the project. Note, there has been very little changes made to about.html, as most changes were relating to the styling. I realise it is probably unconventional/bad practice to create separate CSS files, however I wanted to clearly delineate the styles which have been added in this phase of the project.

blog.html	(New) graphics-based page.
style-project3.css	(New) All styles for this phase of the project are found here.
game.js	(New) Contains the JavaScript code added during this phase of the project.
game.html	(New)
about.html	Alterations in line with heuristic evaluation.
All html pages	I made some minor adjustments, in that I added "Social icons" to the footer, and extra "Menu items" to the Nav.

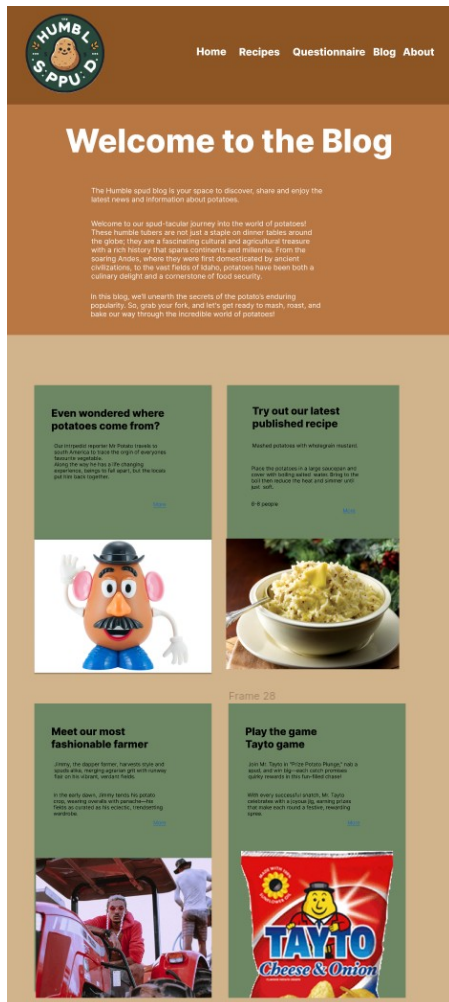
## Links

[Figma files](#)

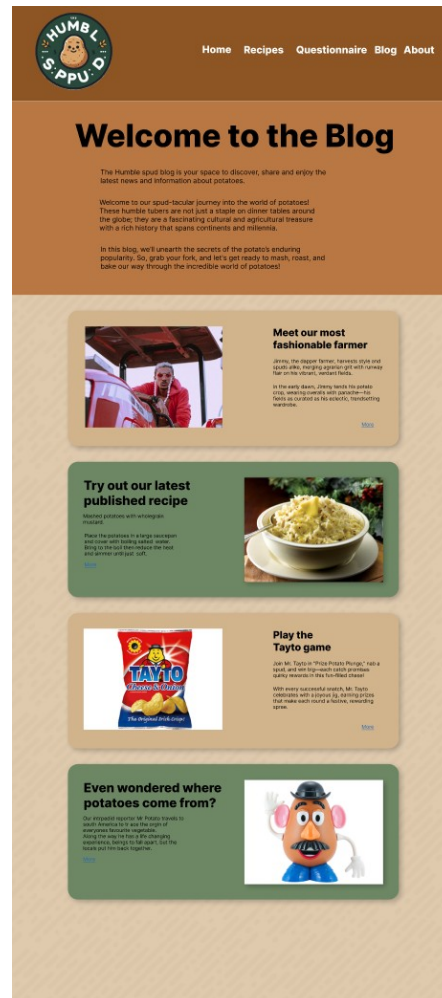
<https://humble-spud.netlify.app>

# Mock-ups alternative designs – Blog page

Version 1



Version 2



## Design choices

I used an online contrast checker to check the contrast between background colour and foreground text. For instance, the hero section has a brown background colour (#B97744), and the original text colour of white failed the Web Content Accessibility Guidelines (WCAG) for both AA and AAA levels.

To enhance the website's visual appeal and break up the uniformity, I introduced a textured background. Additionally, I implemented rounded corners for the information cards to soften their appearance, and I applied drop shadows to both the cards and images, which creates a sense of depth that helps them pop against the rest of the page.

## Spacing

When creating the second mock-up, I focused on consistent spacing throughout. The spacing between each card is 50px, which helps in creating a clear visual separation of the different sections. This consistency in spacing contributes to the overall readability and aesthetic of the layout

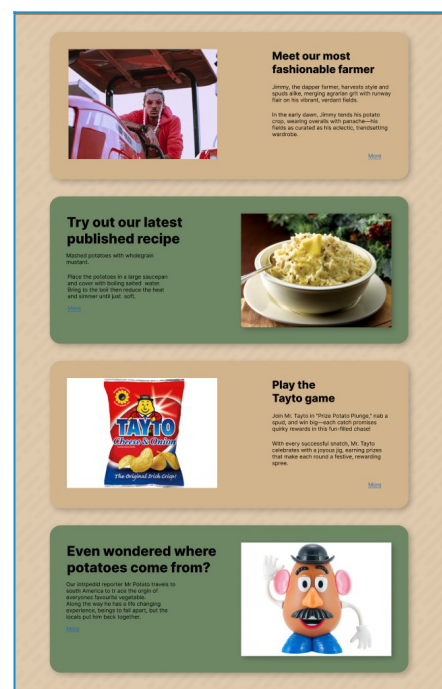


The padding within the cards is also 50px, which is sufficient to prevent the text and images from touching the edges. I added space between the headline text and the body text ensuring that the headlines stand out and capture the reader's attention.

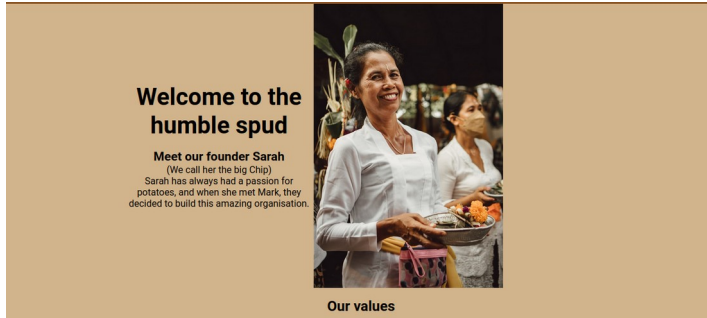
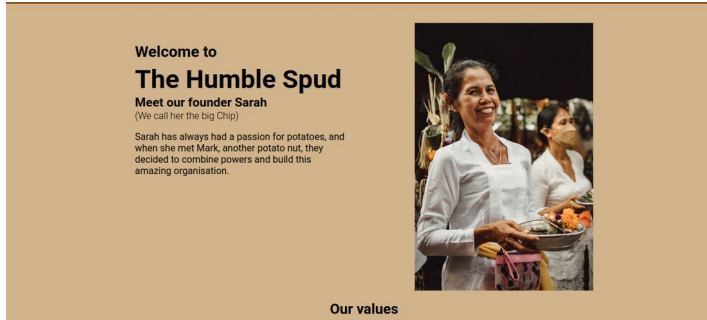
## Balance



I created balance by ensuring each card follows a similar structure in size and placement, which results in a predictable rhythm. The images and text blocks are of a consistent size and are placed in the same position within alternating cards. This repeated pattern, along with the staggered sequence of alternating text and image, guides the eye smoothly from one card to the next, making the overall flow cohesive and balanced.

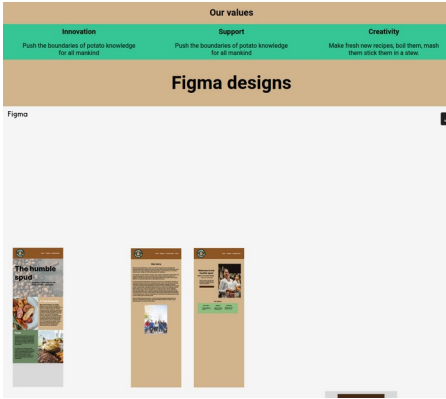
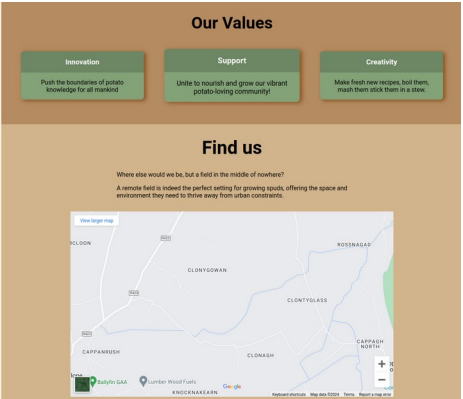
The individual cards feature an asymmetrical balance that achieves visual harmony by pairing a more substantial image with smaller, succinct blocks of text. The larger image captures attention, while the text provides necessary information without competing for focus. The placement of these elements ensures that each card remains visually compelling and content-rich, guiding the user's eye through the information in a natural manner.



## Heuristic evaluation

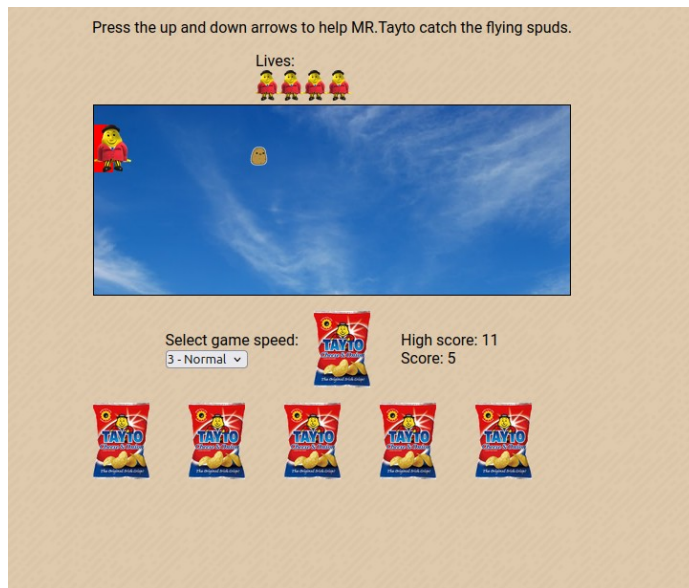
Problem	The image and accompanying text on the About page lack visual balance and adequate white space, leading to a cluttered appearance and possibly detracting from user engagement and comprehension.
Severity	Minor - While the issue doesn't prevent users from accessing information or using the site's features, it can affect the overall user experience and aesthetic appeal, which may indirectly affect user retention and satisfaction.
Heuristic	Aesthetic and minimalist design
Description	The text adjacent to the image appears cramped, lacking sufficient padding around it. This creates a visual tension that disrupts the balance and harmony expected in a well-designed page. The text block's inadequate size does not provide a counterbalance to the weight and presence of the image, leading to a visually uneven distribution of elements.
Recommendation	Increase the padding around the text to enhance white space, which would improve readability and focus on the content. Reposition the text block to more effectively balance the visual weight of the image. Left-align text to enhance readability and visual consistency.
Screenshot	<p>Before:</p>  <p>After:</p> 

Problem	The info cards labelled "Innovation," "Support," and "Creativity" lack distinct visual separation and adequate contrast with the background, which affects their prominence and the user's ability to quickly identify them as noteworthy pieces of information.
Severity	Minor – While the current design may not prevent users from understanding the content, it could reduce the visibility and impact of the key information presented in the info cards, potentially leading to a less effective communication of the site's values or features.
Heuristic	Visibility of system status
Description	Users should be able to easily recognise and differentiate between various parts of the webpage, in this case the info cards are not adequately differentiated. They blend into the page, which may cause users to overlook them or not immediately grasp that they represent key aspects of the organisation's values.
Recommendation	Encase each of the info cards in a distinct box with a subtle border, and shadow, that complements the earthy tones of the website. This will create clear visual separation and enhance the perception of these elements. Highlight the "Support" info card, which is the main value of the organisation. Use a larger box or increase the scale slightly more than the others to signify its prominence, or importance relative to "Innovation" and "Creativity." Ensure that the size difference is noticeable but not overwhelming to maintain the cohesive structure of the page.
Screenshot	<p>Before:</p>  <p>After:</p> 

Problem	The previous design used an iframe containing a Figma design on the "About Us" page, which does not contribute meaningful information to the user about the organisation.	
Severity	Major - While it's not causing a functional breakdown of the website, it's a significant contextual and relevance issue that can confuse users or detract from their understanding of the organisation.	
Heuristic	Match between system and the real world	
Description	The content presented within the website should be familiar and relevant to the user, using real-world conventions and making information appear in a natural and logical order. The "About Us" page typically serves to provide visitors with relevant information about the company, such as its mission, values, history, and location. The inclusion of a Figma design is not relevant and does not contribute to their understanding of the company. This mismatch causes confusion and reduce the overall user experience.	
Recommendation	Replace the Figma design with a Google Maps iframe that shows the location of the organisation. This will provide users with useful information about the company's location in a format that is universally understood and expected on an "About Us" page.	
Screenshot	<p>Before:</p> 	<p>After:</p> 

JavaScript





- A dropdown menu - Line 72 game.html - For selecting the game speed.
- A footer element with social media links – All HTML pages
- Media (Video, Audio) - Line 129 index.html - iframe, youtube video with saerious eats recipe.
- An embedded google map – Line 99 – about.html - Map with organisation location
- Change HTML elements with JavaScript – Line 41 game.html – Change the top style to animate the character up by 10px
- If statement - Line 40 game.js
- Call a function – Line 18 – game.js - Immediately invoked function expression runs when the script is first loaded to initialise the game with the previous high score and invoke the renderLives function, which prints the initial number of lives to the screen.
- onclick event – Line 103 - index.html - Move to the next fact.
- onchange event – Line 72 – game.html - Invokes the changeGameSpeed function which changes the game speed by multiplying by a factor of 0.6seconds
- onmouseover event – Line 59 – game.html - Call the startGame function to begin the game by hiding the start message and setting the game's speed.
- An alert, confirm or prompt box – Line 96 – game.js - Alerts the user of game over when they run out of lives
- Information stored and retrieved from localStorage - Line 96 – game.js - Check to see if there is a high socre from previous game in localStorage