
2022 FOOD EXTRAVAGANZA SKC EVENT

Web App



Isaac Lindroos – 2022

Task (default):

Design and build a concept web app that engages users through its vibrant colours and simplicity. You are to use HTML, CSS and JS libraries (if needed) to create a mobile experience which is responsive to a smartphone's screen size.

Achievement	Achievement with Merit	Achievement with Excellence
<ul style="list-style-type: none"> Use advanced techniques to develop a digital media outcome. 	<ul style="list-style-type: none"> Use advanced techniques to develop an informed digital media outcome. 	<ul style="list-style-type: none"> Use advanced techniques to develop a refined digital media outcome.

Brief:

You are going to plan, design and create a web app concept as a functional prototype which allows users (students, parents and teachers) to view, vote on and provide feedback on **food** served during the 2022 SEPTEMBER TECH EXTRAVAGANZA event in JPC. You are encouraged to be most creative, patient with your client(s) (year 12 food technology students) critiques and flexible with their requests and feedback.

Your clients (food technology students) will critique your initial design and request modifications to suit their exhibit needs on the day. This may include variation of colour themes, font choices, text and images included and layout modifications. You will need to apply the design elements to create an improved, sophisticated and professional outcome (i.e. consider improvements of quality based on contrast, alignment, size, colour, space, proximity, etc.). They may provide assets (images, videos, text) that will need to be optimised for use in the app itself (a variety of images of different formats, sizes, quality and videos that are too long, too short, or need to be re-shot). You are allowed to request high-quality assets from your clients or to provide your services to improve the quality of these assets, or film, take photos on their behalf.

Expect to go through a minimum of 3 design iterations (stages) and make sure you keep evidence of this process.

Functional **Specifications**

- 3 or more pages/windows (eg. landing page, further information on food served, dietary information, voting options, feedback forms) with a clean, modern, professional layout and colour theme
- Website/app must be scalable/responsive (viewable in two or more screen sizes)
- The styling must be implemented externally to ensure ease of maintenance and future-proofing
- The navigation must be intuitive, creative
- Assets provided may need to be optimised for web view

Aesthetic **Specifications**

- Clean, modern, intuitive design

You can pitch your own brief for this standard. You are encouraged to work for a client. Please note that you will need to submit a proposal, which includes a brief, list of specifications and your outcome must adhere to the program requirements below.

Your project idea must be emailed submitted for consideration by **Monday, March 14th**. If it does not meet the requirements of Level 2 (listed below), you will be required to complete the default task (above).

The following software, tools and advanced techniques may be of use in this project:

- Adobe XD, or Thunkable, or equivalent for prototyping tools
- Atom or Adobe Dreamweaver, Adobe Photoshop/Illustrator
- CSS flexbox layout
- Media queries for responsive design
- Boilerplates like [Skeleton](#) or [Bootstrap](#).
- Most Javascript functionality which allows for interactivity on the page (navigation, or galleries, voting and feedback forms)

Success criteria for AS91893 V1

2.4 Use advanced techniques to develop a digital media outcome (4 credits internal)

	Student/ Date	Teacher/ date	Assessment evidence	Assessment strategies	<i>The examples below are indicative samples only</i>
			(A) Use advanced techniques to develop a digital media outcome.		
Achieved			I have used appropriate tools and techniques for the purpose and end users	Written documentation, screenshots, screen casts, teacher observation	<p><i>Tools/Software? Justify your choice.</i> <i>Insert snapshots of your workspace in your documentation.</i></p> <p><i>Document your techniques (code/preview snapshots, before and after previews, specific html, css, javascript code)</i></p> <p><i>Examples of advanced techniques include:</i></p> <ul style="list-style-type: none"> • creating or customising scripts, code or presets • using a combination of steps to manipulate or enhance elements • using a third-party library • using composite effects <p><i>For example (partial evidence):</i> <i>The student has created a web app using html/css with an external stylesheet called style.css. The material is structured and formatted using a range of tags and styles (i.e. it has clear headings, body text and lists/bullets if required). Insert snapshots/evidence here. The student has used an external library to further enhance the user's experience.</i></p>

			I have applied appropriate data integrity and testing procedures	Written documentation, screenshots, screen casts, teacher observation	<p><i>Evidence of data integrity: e.g. all media displays as intended (not missing or corrupted); all text, captions, tooltips appear as intended</i></p> <p><i>Evidence of testing procedures: e.g. regular previews, html/css validation, browser and device testing</i></p> <p><i>For example (partial evidence):</i> <i>The site/app has been tested/previewed either in two unrelated browsers or with at least two different screen sizes. The site looks acceptable on screen on a range of screens.</i> <i>The text has been proof read and there are no obvious spelling/grammatical issues (minor spelling/grammar issues are OK for Achieved).</i></p>
			I have used relevant conventions for the media type	Written documentation, screenshots, screen casts	<p><i>Usability and clarity guidelines for website design: e.g. logo placement, main navigation, etc.</i></p> <p><i>Mobile user experience guidelines</i></p> <p><i>HTML guidelines</i></p> <p><i>For example (partial evidence):</i> <i>The student has used concepts such as contrast, repetition, alignment, proximity and white space to lay out their site.</i></p>
			I have explained relevant implications	Written documentation, screenshots	<p><i>Student must choose specific implications relevant to the outcome, and answer concisely questions like what is copyright and why is it important; then refer to their own outcome.</i></p> <p><i>For example (partial evidence):</i> <i>The student has explained why copyright should be honoured/images should be credited.</i> <i>They have mentioned why the site should be accessible for colour blind/visually impaired users.</i> <i>They have stated why their site should be easy to navigate (the site may have minor navigation issues).</i></p>
			(M) Use advanced techniques to develop an informed digital media outcome.		
Merit			I have used information from testing procedures to improve the quality of the outcome	Written documentation, screenshots, screen casts, teacher observation	<p><i>Keep evidence of improvements – before and after screenshots</i></p> <p><i>For example (partial evidence):</i> <i>The student has previewed the outcome and made changes to the layout/formatting to improve it.</i> <i>The student has asked a volunteer to use their site and made changes based on volunteer feedback.</i> <i>The student has previewed the site using a slightly smaller (or larger) screen and adjusted the layout to ensure the site looks acceptable on a range of wide screen devices.</i></p>
			I have applied relevant conventions to improve the quality of the outcome	Written documentation, screenshots, screen casts, teacher observation	<p><i>For example (partial evidence):</i> <i>The student has used fonts to ensure that the site looks consistent on all devices.</i> <i>The student has used css to go beyond the basics – for example they have used partial transparency, rounded corners, shadows or css grid to create an aesthetically pleasing outcome.</i></p>

			I have addressed relevant implications.	Written documentation, screenshots, screen casts, teacher observation	<p><i>For example (partial evidence):</i></p> <p><i>The student has acknowledged and credited the source of their images (or made it clear that the images are original). They have ensured that all their images have 'alt' tags/descriptions so that the material can be read out by screen-readers (and is thus accessible to visually impaired users).</i></p> <p><i>The site is easy to use/navigate, as per guidelines.</i></p>
			(E) Use advanced techniques to develop a refined digital media outcome.		
Excellence			I have used iterative improvement throughout the design, development and testing process to produce a high-quality outcome	Written documentation, screenshots, screen casts, teacher observation	<p><i>Clear evidence of the iterative process needs to be present:</i></p> <p><i>e.g. Initial navigation, interim changes, final navigation</i></p> <p><i>e.g. Initial colour scheme, interim, final changes</i></p> <p><i>e.g. Initial layout, interim, final layout</i></p> <p><i>For example (partial evidence):</i></p> <p><i>The student carried out testing at key points during the creation of the website to ensure that it was fit for purpose and easy to use. They made changes based on testing and feedback at each cycle in an iterative loop. For instance, they checked that...</i></p> <ul style="list-style-type: none"> <i>– navigation was intuitive</i> <i>– the material was easy to read/understand</i> <i>– the web app loaded quickly</i> <i>– usability heuristics were adhered to</i> <i>– the application of css was effective for the purpose and end-users</i> <i>– they have saved or screen shot their iterative development process.</i>
			I have used efficient tools and techniques in the outcome's production.	Written documentation, screenshots, screen casts, teacher observation	<p><i>For example (partial evidence):</i></p> <ul style="list-style-type: none"> <i>– The student has a sensible file structure with a separate images sub-folder (and possibly sub-folders for css/js as well).</i> <i>– Html/css have been appropriately commented and/or class names are descriptive (e.g. <div class="main">).</i> <i>– Images have been resized and optimised.</i> <i>– Brackets shortcuts, boilerplates, optimize css performance, etc.</i>

Final grades will be decided using professional judgement based on a holistic examination of the evidence provided against the criteria in the Achievement Standard.

Tools, Evidence:

Snapshots of workspace (Atom code and preview, repl.it snapshots, Color palettes generators used, image compression online tools used, HTML/CSS validator snapshots, chrome dev tools used for changing device, Adobe Colour contrast tool, Adobe Color blind website test, etc.)



Figure 1: 'Some of the possible tools used within this development process.'

Visual Studio Code:

"Visual Studio Code combines the simplicity of a source code editor with powerful developer tooling, like IntelliSense code completion and debugging. First and foremost, it is an editor that gets out of your way. The delightfully frictionless edit-build-debug cycle means less time fiddling with your environment, and more time executing on your ideas." – Microsoft

I have used Visual Studio Code as my main development source code editor. I have previously used this platform and have a prior knowledge of the environment. I decided on using this software specifically because of its vast array of open-source extensions and addons that aid and assist with productivity and efficiency. Within VS Code, there are hundreds of different programming languages supported including some of the key languages I utilized, this includes but is not limited to the following;

A) JavaScript:

I used JavaScript in multiple ways to create effective and responsive elements within my web app. This included the use of an external jQuery script that was used in within my 'Homepage' in my first set of development. This script is opensource and can be accessed here: <https://code.jquery.com/jquery-3.3.1.js>

```
1. <script src="https://code.jquery.com/jquery-3.3.1.js"></script>
```

As well as using an external Script, I also implemented inline JavaScript into my HTML Document. (Below: "index.html" – Revision 1).

```

1. <script>
2.
3.     var navButton = document.querySelector('.navigation-button');
4.     var navMenu = document.querySelector('.navigation-menu');
5.     var win = window;
6.
7.     function openMenu(event) {
8.
9.         navButton.classList.toggle('active');
10.        navMenu.classList.toggle('active');
11.
12.        event.preventDefault();
13.        event.stopImmediatePropagation();
14.    }
15.
16.    function closeMenu(event) {
17.        if (navButton.classList.contains('active')) {
18.            navButton.classList.remove('active');
19.            navMenu.classList.remove('active');
20.        }
21.    }
22.    navButton.addEventListener('click', openMenu, false);
23.
24.    win.addEventListener('click', closeMenu, false);
25.
26. </script>

```

B) HTML

HTML was obviously the main language I used throughout the entirety of the development phase. I used multiple different skills and extensions within VS Code to optimise and improve development speeds and workflow. This included HTML Document formatters, skeleton generators, Error prevention tools, & many more. (Below: "food.html" – Revision 1).

```

1. <!DOCTYPE html>
2. <html lang="en">
3.
4.     <head>
5.         <meta charset="utf-8">
6.         <meta name="viewport" content="width=device-width, initial-scale=1.0">
7.         <meta http-equiv="X-UA-Compatible" content="ie=edge">
8.         <title>Food</title>
9.         <link rel="stylesheet" type="text/css" href="style_food.css">
10.        <link rel="icon" type="image/x-icon"
11.            href="https://img.icons8.com/nolan/64/monitor.png">
12.    </head>
13.
14.    <section class="title">
15.        <h1>Food</h1>
16.        <link rel="preconnect" href="https://fonts.gstatic.com">
17.        <link
18.            href="https://fonts.googleapis.com/css2?family=Bebas+Neue&display=swap"
19.            rel="stylesheet">
20.    </section>
21.
22.    <ul>
23.        <li><a href="index.html">HOME</a></li>
24.        <li><a href="food.html">FOOD</a></li>
25.        <li><a href="voting.html">VOTING</a></li>
26.        <li><a href="feedback.html">FEEDBACK</a></li>
27.        <li><a href="resources.html">RESOURCES</a></li>
28.    </ul>
29. <body>

```



```

30. <div class="container">
31.   <div class="heading">
32.     <h3>Check out these <span>Amazing Creations!</span></h3>
33.   </div>
34.   <div class="box">
35.
36.     <div class="dream">
37.       
38.       
39.       
40.       
41.     </div>
42.
43.     <div class="dream">
44.       
45.       
46.       
47.       
48.       
49.       
50.     </div>
51.
52.     <div class="dream">
53.       
54.       
55.       
56.       
57.     </div>
58.   </div>
59. </div>
60.
61. <div class="container">
62.   <div class="btn">
63.     <a href="#">Top</a>
64.   </div>
65. </div>
66.
67. </body>
68. </html>

```

C) CSS

CSS was the second most used language I used through the development process. I utilized multiple skills throughout the process & integrated featured elements. (Below: "style_food.css" – Revision 1).

```

1. ul {
2.   list-style-type: none;
3.   margin: 5px;
4.   padding: 0;
5.   width: auto;
6. }
7.
8. li a {
9.   display: block;
10.  color: white;
11.  padding: 8px 16px;
12.  text-decoration: none;
13. }
14.
15. li a:hover {
16.  background-color: #fc0391;
17.  color: white;
18.  border-radius: 15px;
19. }
20.

```



```

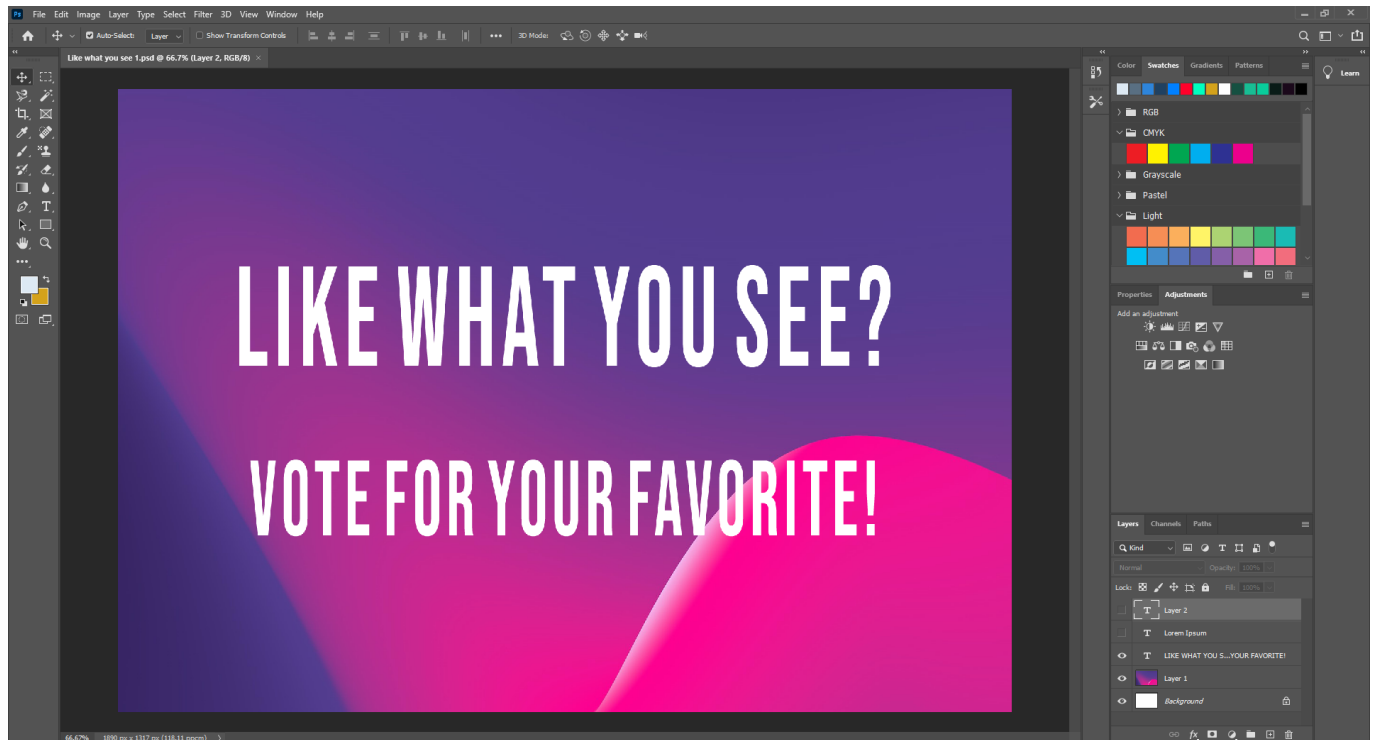
21. body {
22.   background-image: url(images/milad-fakurian-NgLtdWk-6FI-unsplash.jpg);
23.   background-repeat: no-repeat;
24.   background-size: auto;
25.   font-family: 'Bebas Neue', cursive;
26.   font-size: x-large;
27.   font-weight: lighter;
28.   height: 100vh;
29. }
30.
31. .title {
32.   color: white;
33.   margin: auto;
34.   height: auto;
35.   text-align: center;
36.   font-size: 50px;
37.   font-family: 'Bebas Neue', cursive;
38.   box-sizing: border-box;
39.   border-color: #fc0391;
40.   border-radius: 15px 15px 30px 30px;
41.   margin: 40px 0 70px 0;
42.   padding: 15px 40px ;
43. }
44.
45. .subtitle {
46.   color: seagreen;
47.   margin: auto;
48.   height: auto;
49.   text-align: center;
50.   font-size: 50px;
51.   font-family: 'Bebas Neue', cursive;
52. }
53.
54. .bodytext {
55.   padding: 30px;
56.   font-size: 15px;
57.   text-align: left;
58. }
59.
60. .footer{
61.   padding: 30px;
62. }
63.
64. @import
65.   url('https://fonts.googleapis.com/css2?family=Poppins:wght@100;200;300;400;500;600;700;800;900&
66.   display=swap');
67.
68. *{
69.   margin: 0;
70.   padding: 0;
71.   box-sizing: border-box;
72. }
73.
74. .container{
75.   display: flex;
76.   flex-direction: column;
77.   justify-content: center;
78.   align-items: center;
79.   text-align: center;
80.   margin: 40px 20px 0 20px;
81.   color: #ffffff;
82. }
83.
84. .container .heading{
85.   width: 50%;
86.   padding-bottom: 50px;

```

```
86.
87. .container .heading h3{
88.   font-size: 3em;
89.   font-weight: bolder;
90. }
91.
92. .container .heading h3 span{
93.   font-weight: 100;
94.   color: #fc0391;
95. }
96.
97. .container .box{
98.   display: flex;
99.   flex-direction: row;
100.   justify-content: space-between;
101. }
102.
103. .container .box .dream{
104.   display: flex;
105.   flex-direction: column;
106.   width: 32.5%;
107. }
108.
109. .container .box .dream img{
110.   width: 100%;
111.   padding-bottom: 15px;
112.   border-radius: 15px 15px 30px 30px;
113. }
114.
115. .container .btn{
116.   margin: 40px 0 70px 0;
117.   background: #fc0391;
118.   padding: 15px 40px ;
119.   border-radius: 15px 15px 30px 30px;
120. }
121.
122. .container .btn a{
123.   color: #fff;
124.   font-size: 1.2em;
125.   text-decoration: none;
126.   font-weight: bolder;
127.   letter-spacing: 3px;
128.   font-family: 'Bebas Neue', cursive;
129. }
130.
131. @media only screen and (max-width: 769px){
132.   .container .box{
133.     flex-direction: column;
134.   }
135.
136.   .container .box .dream{
137.     width: 100%;
138.   }
139.
140. }
141.
142. @media only screen and (max-width: 643px){
143.   .container .heading{
144.     width: 100%;
145.   }
146.
147.   .container .heading h3{
148.     font-size: 1em;
149.     color: #ffffff;
150.   }
151.
152. }
```

Adobe Photoshop:

I used Adobe Photoshop to Create some images & Graphics for my web app, (See below). These included multiple layers & elements in order for them to fit into my design & theme.

**Procreate:**

I used Procreate, an IOS App to Create & develop my initial moodboard, (See below). The

Unsplash:**Github:****Online Image compression:**

Folder organization:

Like the sections and aisles in a grocery store, an effective file and folder structure helps you keep your documents organized, so you're not constantly wasting time searching for something when you need it. Not only does this reduce frustration, but it also boosts your productivity and efficiency. Below, you can see my folder organisation that supports this idea. Below you can see my file structure that I used in the first stage of my site testing & development in the 'Expanded tree' Format.

WEBSOURCE

- └ documents
- └ fonts
 - └ azonix
 - └ Azonix.otf
 - └ READ FIRST.txt
- └ images
 - └ blini.jpg
 - └ Cucumber Canapes with Smoked Salmon Mousse.mp4
 - └ egg.jpg
 - └ icons8-puzzle-64.png
 - └ jellies.jpg
 - └ like_what1.png
 - └ like_what2.png
 - └ markus-winkler-3HQdnXKL91U-unsplash.jpg
 - └ melon.jpg
 - └ milad-fakurian-NgLtdWk-6FI-unsplash.jpg
 - └ milad-fakurian-nY14Fs8pxT8-unsplash.jpg
 - └ milad-fakurian-u8Jn2rzYlps-unsplash.jpg
 - └ mingwei-lim-DEM_3xnBwXE-unsplash.jpg
 - └ mozzarella.jpg
 - └ quiche.jpg
 - └ ricotta.jpg
 - └ roast.jpg
 - └ salmon.jpg
 - └ shrimp.jpg

```

|   ├── spdish.jpg
|   ├── sweetpotato.jpg
|   ├── terrina di verdure.jpg
|   └── your-guide-finding-free-creative-commons-images-and-other-media-online.1280x600.jpg
├── feedback.html
├── food.html
├── gallery_food.js
├── index.html
├── resources.html
├── style_feedback.css
├── style_food.css
├── style_food.scss
├── style_index.css
├── style_resources.css
├── style_voting.css
└── voting.html

```

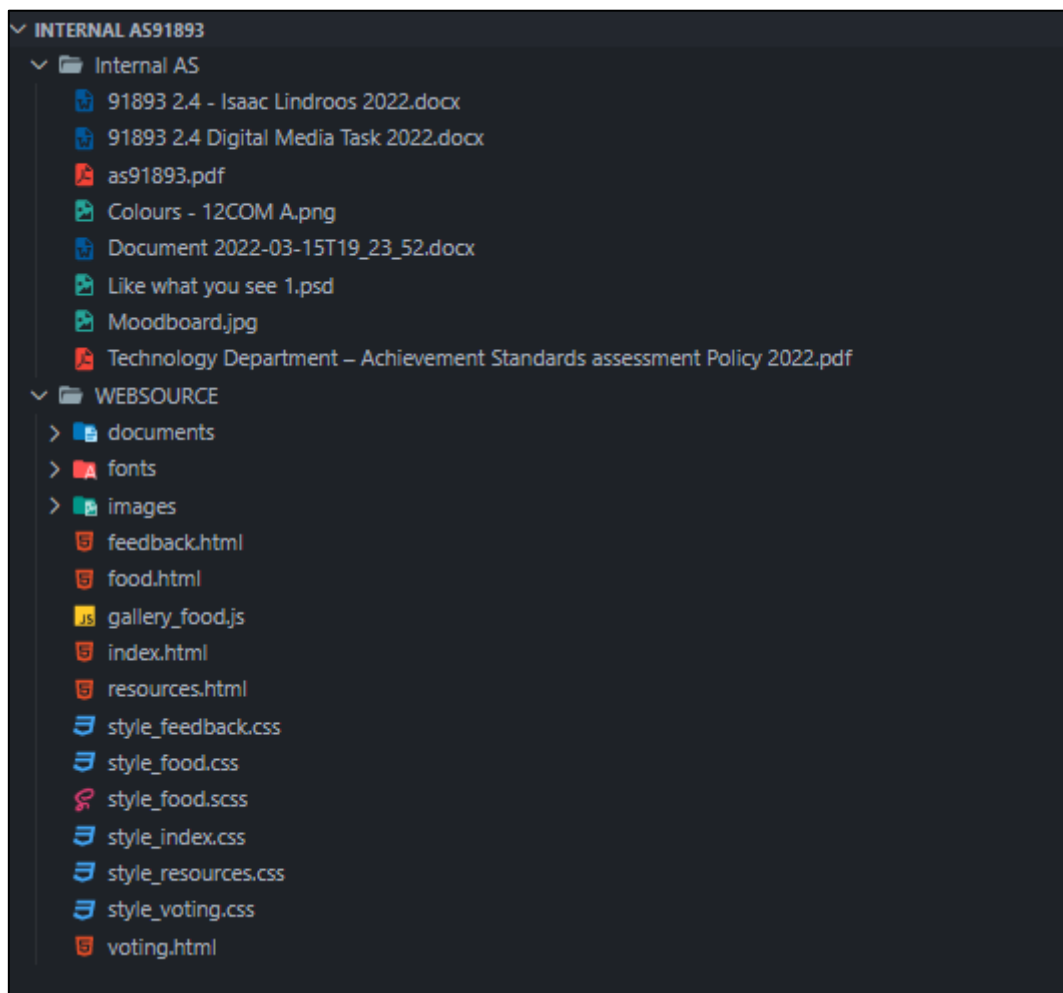


Figure 2: 'First stage Development file Structure. Note the underscore used in the stylesheet to refer to its parent html document.'

Testing evidence:

Website testing is a testing process meant to identify errors in a website, web service or any other web-based application. During this phase, website testers evaluate different components of the website and examine each feature, both individually and collectively. The testing procedure is extremely thorough, and QA web testers check the entire web system end-to-end before releasing the website for use. As a result, they are able to evaluate how well the website fulfils its purpose. Website software testing removes the hurdles that can affect website ranking,

and it can boost its interactivity through optimal design and makes it easier to backlink. While helping to design a website to increase brand awareness, generate leads, drive sales is essential, make sure that all the website features work optimally. Testing is also used throughout the entire

Previews (VS Code):

Comments: (any issues?)

Browser testing (Chrome, Edge, etc)

--insert your evidence here--

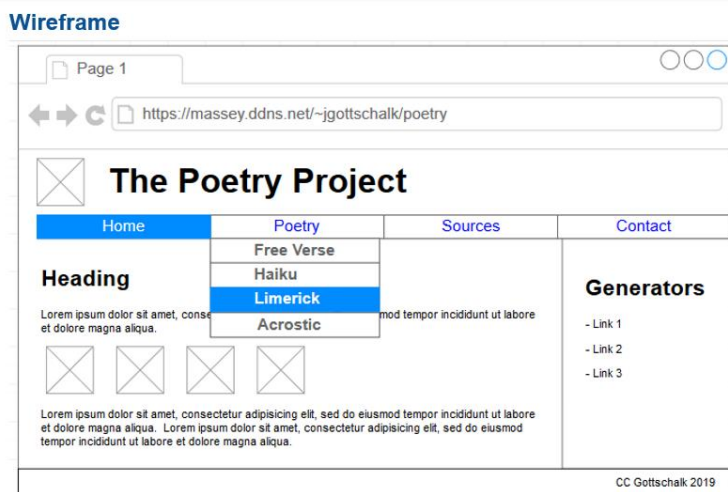
Comments?

Device testing (small screen, large screen)

Comments?

Relevant Implications:

EXAMPLE 1 (specific implications related to the WIREFRAME of a web app):



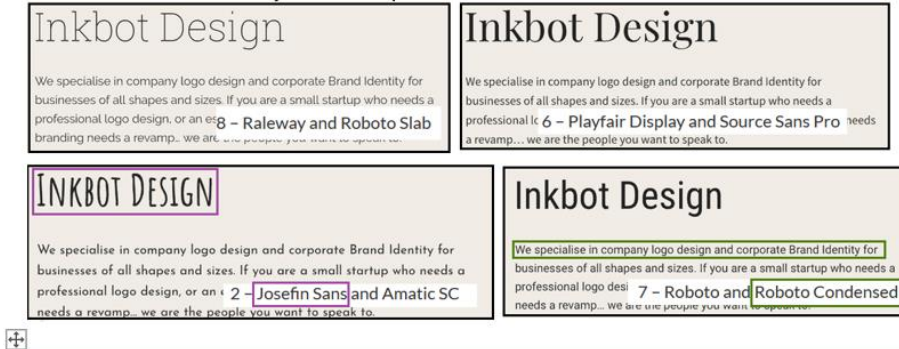
There are several relevant implications related to the site's basic layout. The first is **usability**. If the site is not carefully laid out so that navigation is clear and 'obvious' - users will get bored / confused and won't engage with the content. Another implication is **aesthetics**. If the site layout is too crowded, users won't enjoy their experience and will be eager to leave. A 'clean' easy to use layout will help the site be more successful. There is also an important '**social**' implication to consider. The site is aimed at a general audience (ages 13 and up) so the layout needs to appeal to a wide range of users.

EXAMPLE 2 (specific implications related to the FONT of a website):

Font Choice

Google fonts allows designers to choose from a very large number of fonts and working out which fonts work well together can be quite hard. I googled for 'google font pairs' and quickly previewed some of the suggestions from this site: <https://inkbotdesign.com/google-font-combinations-mixing-typefaces/>

Here is a screenshot of my favourite options and final choice...



The implications related to font choice include...

Aesthetics - *explanation goes here*

Usability - *explanation goes here*

Accessibility - *explanation goes here*

Intellectual Property - *explanation goes here*



• RELEVANT IMPLICATIONS •

SOCIAL

WILL IT HAVE A POSITIVE SOCIAL IMPACT?

Does it (mis)represent any social group?
Could it cause offence to anyone?
Could it stigmatise or stereotype?
Does it appeal to all social groups?
Consider age / gender / ethnicity

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• RELEVANT IMPLICATIONS •

INTELLECTUAL PROPERTY

WHO OWNS THE IDEAS, IMAGES AND TEXT?

Trademark and Copyright law
Have you protected your IP?
Who owns the ideas, images and text?

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• RELEVANT IMPLICATIONS •

ACCESSIBILITY

CAN ANYONE ACCESS IT ON ANY DEVICE?

Is it accessible for:
dyslexic / colourblind / autistic /
impaired vision / disabilities

Can it be accessed on different devices?

Inglewood High School
Icons by Icon Field

• RELEVANT IMPLICATIONS •

FUTURE PROOFING



CAN IT BE KEPT UP TO DATE?

- Is it easy to update?
- Can it automatically update?
- Can it be expanded and improved?
- Does it need an expiry date?

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• RELEVANT IMPLICATIONS •

ETHICAL



IS IT MORAL? IS IT RIGHT?

- Could it cause anyone harm?
- Is it violent or pornographic?
- Does it encourage responsible choices?
- Does it exploit users?

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• RELEVANT IMPLICATIONS •

PRIVACY




IS DATA KEPT PRIVATE?

- Have you kept personal data safe?
- Are you sharing personal information?
- Do you need permission from people in images?

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• RELEVANT IMPLICATIONS •

END USER



WHAT SPECIFIC NEEDS DOES YOUR END USER HAVE?

- Does it do what the user needs?
- Suitable language and reading level
- Appeal to the right demographic
- Accessible on the right devices

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• RELEVANT IMPLICATIONS •

AESTHETICS



DOES IT LOOK GOOD?

- Does it appeal to the right audience?
- Does it follow design conventions?
- Does it convey the right image?

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• RELEVANT IMPLICATIONS •

LEGAL




DOES IT OBEY ALL RELEVANT LAWS?

- Copyright and Intellectual Property
- Harmful Digital Communications Act
- Data Protection / Privacy / Libel

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• RELEVANT IMPLICATIONS •

FUNCTIONALITY




DOES IT WORK WELL?

- Does it load quickly?
- Are there glitches or bugs?
- Do all the links work correctly?
- Will it work on all browsers and devices?

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• RELEVANT IMPLICATIONS •

USABILITY



IS IT EASY TO USE?

- Does it follow the Usability Heuristics?
- Can the user avoid and correct errors?
- Does it use recognised conventions?
- Does it match the real world?
- Is the system status visible?

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• RELEVANT IMPLICATIONS •

CULTURAL



IS CULTURALLY APPROPRIATE?

- Appropriate use of Te Reo Māori with correct spelling / punctuation / macrons
- All cultures treated fairly

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