* Semantic Elements
  + Importance of Semantic Markup
  + Examples in 5+
* Site Structure and Navigation
  + Justification of content arrangement
  + Nav diagram
  + Connection to UX
* UI, Theme, and Colour scheme
  + CSS Rule explanation
    - Reset and Style.css
* Rationale behind design choices

## Semantic Elements

Semantic elements are a specific type of HTML5 element. Semantics is the study of linguistic meaning, and as such semantic elements are those which describe their contents. Examples of this are *<img>,* *<table>,* and *<article>*, all of which describe their purpose (an image, a table, and an article respectively). Examples of non-semantic elements would be *<span>* or *<div>,* as both of those elements state nothing about their contents innately.

Many semantic elements don’t have any innate effect on how the website is displayed (Take *<article>* or *<section>* for example). So why use them? Generally, semantic elements are used for accessibility. Most people will view the website as intended, and so in those cases it doesn’t matter if you use a *<div>* or a *<section>*. But some people will use screen reader software to navigate the internet. And for them, being able to immediately tell what an element does is very useful.

For example, let’s take the *<nav>* tag, which is used to set up a navigation section (e.g. “About me”, “Projects”, etc.). To the common user, It doesn’t matter if you use a *<nav>* tag or a *<div>,* as neither have any innate effect on the way the page is displayed. But to someone using a screen reader, Its much easier to use the navigation bar if it’s labelled as such. Otherwise, It will take them far more time to navigate your website.

Semantic elements used in this project include:

* *<section>*
* *<article>*
* *<nav>*
* *<img>*
* *<header>*
* *<footer>*
* *<h1>*, *<h2>* and *<h3>*

These can all be described as semantic as they are all self-descriptive (remember that h1, h2, h3 are all short for Header 1, Header 2, Header 3.)

## Examples of Semantic Elements in the HTML5 markup

This shows how the navigation section of the website has been marked up. I’m using an unordered list, which is contained within the *<nav*> tag. It’s worth noting also that I’m using an *<h1>* tag at the top, showing the title of the website within the navigation window.

A screen shot of a computer code

AI-generated content may be incorrect.

Here you can see the front page of the website. (The navigation window shown above shows up here.) This is all wrapped in the *<header>* tag, as all of this is the header to the website (navigation, external links, etc).

A computer screen shot of text

AI-generated content may be incorrect.

Here you can see the “About me” section of my website. Of course, this has all been wrapped in a *<section>* tag, because it is a section of my website! There’s nothing special about *<section>* and I could have used a *<div>*, but this is a more accessible solution. My other sections (Skills, Blog, Projects, etc) Are also wrapped in *<section>* tags, just like this one.

A screenshot of a computer program

AI-generated content may be incorrect.

Each blogpost in my Blog section are wrapped in the *<article>* tag. Each of them are by definition articles, so this makes sense. I considered using *<section>* here, but I think *<article>* is more specific to what a blogpost is, and as such it’s better than *<section>.*

A screen shot of a computer program

AI-generated content may be incorrect.

At the bottom of the main page, there is a section which contains my contact details, it’s far smaller than the rest of the sections, so why not class it as a footer? I’m using the *<footer>* tag instead of the *<section>* tag here. While I could have used *<section>* or *<footer>* (as both are semantic elements) I went with *<footer>* as this might signal to a screen reader that this is nearing the end of the page.

A screen shot of a computer screen

AI-generated content may be incorrect.

## Site Structure and Navigation

The website is structured as follows: There are seven sections on the website:

* Homepage
* About me
* Skills
* Projects
* Blog
* Contact
* Admin

Of these sections, four of them (Homepage, About me, Skills, Contact) are on the same page. You need only scroll down from the Homepage to find the Skills section, for example. The other three are external. I decided to place the Projects and Blog sections on their own webpage as they will have an arbitrarily large amount of content which will grow as I increase my portfolio. This means that if they were all on one webpage, they would take up loads of space, and it would take ages to scroll through them. The admin section is on a separate page as it doesn’t contain any useful information to the common user and thus shouldn’t necessarily be displayed to them (this page is accessible via a link at the bottom of the homepage.)

Homepage

The Homepage contains a navigation menu. This is a horizontal list of items, starting with my name “Luka FB Lepkowski” and then a set of hyperlinks (using the *<a>* tag). These hyperlinks point to each other section of the website (other than Admin), and can be used either to automatically scroll to a section, or link to a section depending on if that section is internal or external.

The homepage also contains a vertical list of hyperlinks to my various social media platforms (github, itch.io, linkedin, bluesky). While there is a section for contact at the bottom of the page, having these platforms immediately accessible makes it easier for someone coming to the website to quickly see what I’ve done, on a platform they are already potentially familiar with.

About me

The about me section contains a photograph of myself, my name and epithet, and a few paragraphs of me talking about my ambitions and interests. I chose a silly photo of myself as I think showing I am a more creative person than a professional, business type is important considering I want to primarily work in game development. Showing I am a character is important.

Skills

The skills section consists of three lists (Backend, Game Development, and Frontend) all of which contain a set of photos and labels for those photos. These photos are the logos of certain programming languages or frameworks (PHP, OpenGL, JS etc), labelled with their name (as some of the logos might not be the most known, LWJGL for example.) I didn’t want to focus too much on my skills, but showing a breadth of knowledge is important here.

Projects

The projects section is on a separate page, as I expect it might grow in the future. It’s a big list of project *<section>* elements, each of which containing a Name, Release Date, Description, and links to source code / download. All the content here is taken from my old website, which ran off PHP. This was originally loaded via a CSV file, which I intend to implement in the second phase of this project.

Blog

Like the Projects section, the Blog is on a separate page, as I can expect it to grow in the future (despite only having one entry now.) It’s a list (or, at least, it will be) of *<article>* elements, all containing a Title, Publish Date and Content. I think loading all of this from a CSV file in the future could be a good idea, as this way I could shorten them to a “Read more” sort of thing.

Contact

This is a mini section at the bottom of the homepage, containing my email, BlueSky address, and a repeat of each social media shown in the Homepage (they should also be here, as they’re points of contact). This is also where I’ve hidden the admin page access, although that’s just because it’s at the bottom of the page.

Admin

The admin page contains a log-in form, asking for a Username and Password field. That’s it for now, and the form doesn’t do anything right now because we haven’t done the backend section.

## Justification of content arrangement

I’ve already written about it a bit previously, but I think putting the Projects and Blog section on separate pages is wise. They both might grow to contain an extremely large amount of data, and as such they will need to be contained. It’s important that people aren’t forced to trod through it when trying to access other parts of the website. The about me section, and the skills section should be on the front page of the website, I believe, as they are more instantly accessible to users. More people will be interested in the About me section than the Blog, for example (and it’s only short). I’ve implemented a nice scrolling transition to these pages when using the navigation bar aswell.

## User Interface

## Design Rationale