

Background

The assignment we got was to create our own portfolio site, that is good enough to go live. You need to brand yourself both in order to apply for upcoming LIA but also for the future when applying for work. A portfolio site is an excellent way to show your skills and different projects you have done.

To be able to create a good enough page or actually an excellent page, you need to have a certain understanding of HTML, CSS3 and JavaScript, and how to make the site responsive and accessible.

First step is of course to understand and know what each language stands for and you will also need to know some history behind all these languages/programs. If you don't know about this, you will not be able to create a good structure and to follow the standards for each. I would say that this is one of the most important aspect in building readable, clean and understandable code. When it is not maybe important for the portfolio site, you need to bear in mind that for other sites somebody else might need to take over after you.

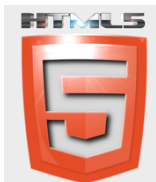
My first step in building my portfolio was to define and structure my thoughts and the architecture of my webpage. One way of doing this is to use for example Trello or GitHub's project site. This will give you a nice overview what needs to be done and also what you can considered as done. For me, it was also good to make a quick sketch on paper to get an idea on how the website should look like when it is done.

Purpose:

To create a webpage that is responsive and accessible and a site that have relevant SEO:s (search engine optimization words). This in order to attract future employers and other clients that might recommend you for future assignments.

Another important purpose was also to learn and understand more what HTML, CSS, SEO and accessibility stands for which is of highest important for your future career.

HTML



Everything starts with HTML and here you create a good structure for your upcoming page. What is HTML; in the past HTML was the only way to create a good structure for your page and it was actually the language that allowed us to create horizontal layouts. It was quite boring though, and you could only get a static page. And the earlier versions of HTML were limited in its functionality and had to be extended through plugins.

Even with HTML5, you really only can get static pages still, but it did step up its game. HTML5 was created due to the demand for more impressive web features. HTML5 is meant to solve some of the messy problems it had before, such as that all different browsers implemented HTML's features in its own way and it did get messy.

HTML5 came along to create a cleaner and a more efficient web. A lot more features was added such as, <nav>, <header>, <footer> and much more. And lucky us, it has improved the users experience of the web and I have tried my best to follow and use the web standards, as it will result in a more efficient content and it will improve the performance. Keep in mind that is the best practise.

```
<header>
<!--SiteNav-->
<div class="container">
  <br>
  <ul class="menu">
    <li class="links"><a id='home' class="a-tag" href="#">Home </a><\/li>
    <li class="links"><a id='about-me' class="a-tag" href="#">About me </a><\/li>
    <li class="links"><a id='skills' class="a-tag" href="#">Skills </a><\/li>
    <li class="links"><a id='projects' class="a-tag" href="#">Projects </a><\/li>
    <li class="links"><a id='contact' class="a-tag" href="#">Contact<\/a><\/li>
  <\/ul>
  <br>
<\/div>
<\/header>
```

I have for example used the <header>, <footer> element when I built my site. Under <header> I have specified a group of links that are used to navigate a site. I have used the “new” features when building my structure in HTML, as I wanted to define my content and what purpose it has. This will

allow todays search engines as well as the futures to make more sense on your content. This is only one example on how you can structure your HTML code a lot better.

As mentioned, I did build the structure with HTML but without CSS3 I would not have been able to add different fonts, flexbox, hover-effects and so much more. This is why I will talk a little bit about CSS and CSS3 in the next sector.

CSS



I could not get the design I wanted without CSS3 but before the year of 2000 you actually had to manage without CSS at all. CSS didn't come along until then, but when it finally came it made is so much easier to style you webpage.

CSS made it possible for developers to move away from only table-based layouts and to take a more sematic approach to development. The main idea behind cascading style sheets and a more sematic approach, is that It should be kept separate from HTML. This will make it easier and quicker to change the design and it also allows us to reuse more code. We can also thank CSS for giving us more control over the visual layout and formatting and we do this in a more sematic way, which means that every HTML element has a role and it should only be used for that role.

But it took around 9 years for CSS level 2 to reach the Recommendation status, the working group divided CSS in smaller components called modules. Each module is now an independent part of the language and will be able to move towards standardization on its own pace. As before some small or secondary features could hold back the whole specification.

CSS3 is the latest evolution of the CSS language and it brings in many new features such as shadows, rounded corners, grid layouts and much more. One new future that I have used when I built my page is the flexbox. It has helped me a lot when placing items on my webpage as well made my page responsive without much effort.

It is very important to make your site responsive due to the matter that you should be able to in an easy way read the pages on whichever browser or device you use,

laptop, mobile, iPad etc. It will become more and more important to build responsive sites due to the fact that the computer science sector is changing faster and faster.

Even that I came along way with HTML and CSS, I still needed to add JavaScript to end up with the design I wanted. JavaScript (also known as JS) alongside with HTML and CSS is the three core technologies of the World Wide Web. JS was introduced in the middle of the 90: s and has since been adopted by all major graphical web browser. I will talk a little bit about JS in the next sector.

JavaScript

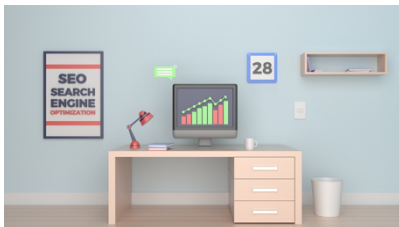


There have been many versions of JavaScript and after version 4 was abandoned in 2008, the less ambitious version 5 came out 2009. Version 6, also known as ES6 came along 2015 and added some new features such as: let, const etc.

With JS you can create animations and make your site livelier as it is a prototype-based, multi-paradigm scripting language that is dynamic and supports, imperative, object-oriented and functional programming styles.

On my portfolio site, I used JS to be able to have a “side” for each link, Home, About Me, Skills, Projects and Contact. I also used JS to be able to have different background colours on each site. A part of the assignment was also to copy paste a JS-function, which I did with my skills bar.

SEO (Search Engine Optimization)



You most likely want traffic to your website especially if you own your own business or have a business to manage. This is one reason why SEO is important as it is there to help you improve the traffic to your website and much more.

The points that is of highest important for me and for my portfolio is the following:

- Increased traffic – the higher a website ranks for keywords the more traffic will you get. This will help me to get a LIA-spot and future employments.
- Branding – this is very important as nobody will know who you are from the start. And if my brand will be near the top in the search engines it will of course help me to build my brand.
- Investment in my future – you will have to spend time on SEO as it is a process and you won't see the results until 6-9 months later. When it starts to pay off though you will benefit from free traffic.
- Sustainability – if the SEO is done right it can bring a great deal of sustainability. When you get qualified traffic to your website, you will generate leads or sales. If your website has a consistent flow or traffic it will allow your business to grow and also to build a high brand awareness.

I have used the following words: title, headers, all the pictures, etc and hopefully I will not end up with no visitors. If it is possible it is important to link to other pages, and hopefully you will get some links back to your page as well.

Make sure though that you don't use words that has no relevance for your webpage and what you offer. Make sure that you have a good technical platform for your webpage that Google easy can read and like.

Accessibility



Wikipedia says the following about Accessibility: "Accessibility refers to the design of products, devices, services, or environments for people who experience disabilities."

You can divide the disability according to:

1. You can have a permanent disability – blind, deaf and so on.
2. Temporary disability – it can be a physical or mental disability that stops you from discharging of responsibilities for a short period of time.
3. Situation or Conditional disability – you can't do things due to the situation you find yourself in, such as slow internet etc.

When you look at the Web and Internet, it is an important resource and an increasing resource in many aspects of your life, which can include; employment, education, health care, and much more. That's why it is important that the Web is accessible to everyone in order to provide equal opportunity and access to people with disabilities.

Other important reason is that the web can help people with disabilities to participate more actively in the society and it is an easy way to do business for people with disabilities.

What can you do to make your site more accessible; for example, you can use the alt-tags, HTML attribute. Which you use to describe an image. It can look like this: ``

Remember to use default HTML Tags, use buttons for buttons, anchors for links and so on. Don't mess them up them, as it will confuse the screen readers because all screen reader follows a particular way to read the elements on a web page.

Use closed captions for media, this is not only important for accessibility but also for users that can't play audio due to the surroundings they are in, for example an office or a noisy location. Do also consider providing a text transcript for podcasts or other audio elements as this will make it easier for search engines to index the content and it will be helpful for people who can't listen to the audio. Make sure to read the international standard guide: [Web Content Accessibility Guidelines \(WCAG\) 2.0](#).

Unfortunately, I am pretty sure I have not made my site accessible enough, but I have for example used the alt-tags and I have tried to use the web standards. This is of high importance but there is a lot of hard work behind this, and things that might

seem simple is not. But my aim is to provide a better and better page alongside as my skills improves.

Summary



Overall this was a very fun and important assignment. It not only helped me to understand HTML, CSS3 and JavaScript more, it will also help me on my way to find a LIA-spot and future jobs. It gave me some headache from time to time but what a joy when you manage to solve the challenges and problems.

We have to remember that there will always be new challenges and new territories to explore. Never you dare, to forget to explore and to be curious about this Wide Wide World, otherwise you might end up bored with your craft.

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Contributor (JavaScript code): Philip Ribera

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