



Project deadline: End of April

Last week we looked into responsive websites and this would be the perfect topic for a small project, which will count for the AC (Avaliação Continua). The idea is to make a bootstrap-based website for your club, university, hobby, this course, coronavirus, whatever.

The only requisites is that it should:

- Look awesome
- Be responsive on laptop and mobile phone (and if you wish tablet, but not required)
- Uses Bootstrap4

When done, you should demonstrate/present your website (you can place it in the Virtual Machine and create a local webserver). You also need to hand in a (short) design-book. This is basically a few pages where you show you followed the 8 steps described on the next page.

Making a local webserver can be very easily obtained by using NPM. For windows there should be sufficient tutorials online, for the virtual machine you just need to install a small package using the following command line in a terminal:

```
sudo npm i -g http-server
```

Then if we assume you have your website (index.html) in the ~/html then you just need to execute the following command inside that directory:

```
http-server .
```

Which will respond with:

```
Starting up http-server, serving .  
Available on:  
  http://127.0.0.1:8080  
  http://10.0.2.15:8080  
  http://10.8.0.2:8080
```

A good tutorial to follow can be found here: <https://websitesetup.org/bootstrap-tutorial-for-beginners/>

When presenting, you need to show off your custom skills!

The following design process is adapted from <https://webflow.com/blog/the-web-design-process-in-7-simple-steps>, but you are free to find better ones (more related to responsive web design).

The Eight Steps of Web Site Design

Well-designed websites offer much more than just aesthetics. They attract visitors and help people understand the product, company, and branding through a variety of indicators, encompassing visuals, text, and interactions. That means every element of your site needs to work towards a defined goal.

But how do you achieve that harmonious synthesis of elements? Through a web design process that takes both form and function into account.

1 Goal identification

In this initial stage, the designer needs to identify the end goal of the website design, usually in close collaboration with the client or other stakeholders. Questions to explore and answer in this stage of the design and website development process include:

- Who is the site for?
- What do they expect to find or do there?
- Is this website's primary aim to inform, to sell or to amuse?
- Does the website need to clearly convey a brand's core message, or is it part of a wider branding strategy with its own unique focus?

This is the most important part of any web development process. If these questions aren't all clearly answered in the brief, the whole project can set off in the wrong direction.

It may be useful to write out one or more clearly identified goals, or a one-paragraph summary of the expected aims. This will help to put the design on the right path. Make sure you understand the website's target audience, and develop a working knowledge of the competition.

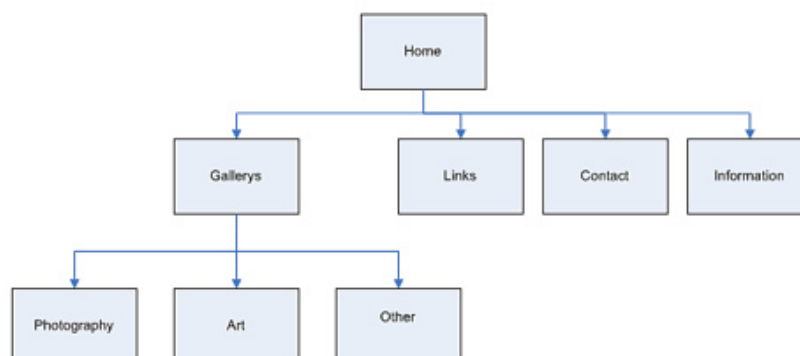
2 Scope definition

One of the most common and difficult problems during web design projects is to maintain the focus. The client sets out with one goal in mind, but this gradually expands, evolves, or changes altogether during the design process — and the next thing you know, you're not only designing and building a website, but also a web app, emails, and push notifications.

This is a problem if you have a deadline to submit the work!

3 Sitemap

A sitemap for a simple website. Note how it captures page hierarchy.

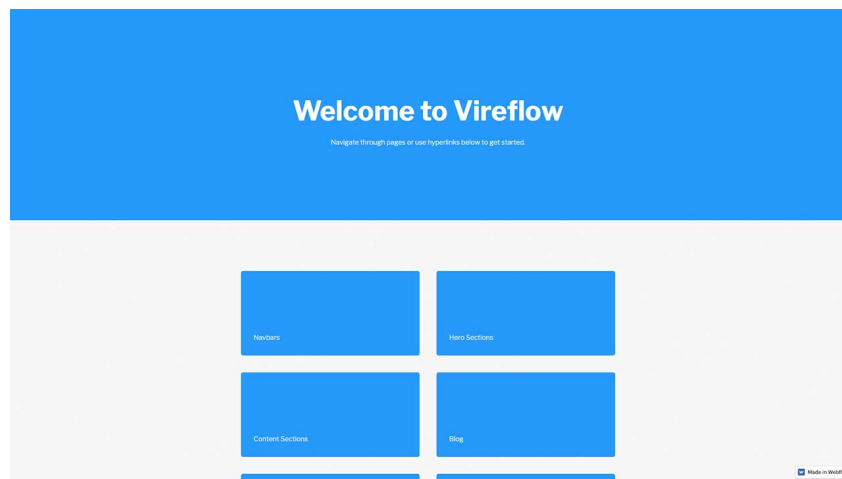


The sitemap provides the foundation for any well-designed website. It helps give web designers a clear idea of the website's information architecture and explains the relationships between the various pages and content elements.

Building a site without a sitemap is like building a house without a blueprint. And that rarely turns out well.

4 Wireframe creation

The next step is to find some design inspiration (look around the web for nice sites) and build a mockup of the wireframe. Wireframes provide a framework for storing the site's visual design and content elements, and can help identify potential challenges and gaps with the sitemap. Remember, it is often easier if you start the process with the smallest screen supported, let's say mobile phone.



You can use any app you like, but don't make them too detailed. You can even sketch them:



Although a wireframe doesn't contain any final design elements, it does act as a guide for how the site will ultimately look. It can also act as inspiration for the formatting of various elements. Some designers use slick tools like Balsamiq or Webflow to create their wireframes.

5 Content creation

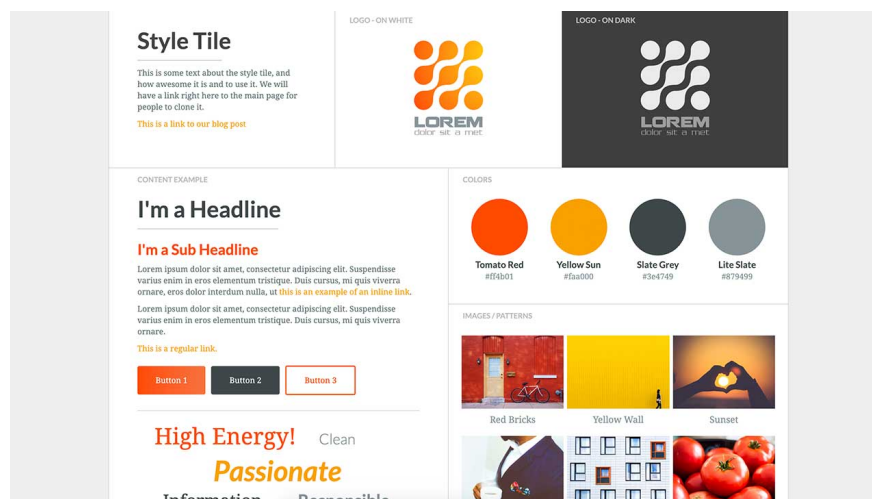
Once your website's framework is in place, you can start with the most important aspect of the site: the written content.

First, content engages readers and drives them to take the actions necessary to fulfill a site's goals. This is affected by both the content itself (the writing), and how it's presented (the typography and structural elements).

Dull, lifeless, and overlong prose rarely keeps visitors' attention for long. Short, snappy, and intriguing content grabs them and gets them to click through to other pages. Even if your pages need a lot of content — and often, they do — properly “chunking” that content by breaking it up into short paragraphs supplemented by visuals can help it keep a light, engaging feel.

6 Visual elements

Finally, it's time to create the visual style for the site. This part of the design process will often be shaped by existing branding elements, colour choices, and logos, as stipulated by the client. But it's also the stage of the web design process where a good web designer can really shine.



Images are taking on a more significant role in web design now than ever before. Not only do high-quality images give a website a professional look and feel, but they also communicate a message, are mobile-friendly, and help build trust.

7 Testing

Once the site has all its visuals and content, you're ready for testing. Thoroughly test each page to make sure all links are working and that the website loads properly on all devices and browsers. Errors may be the result of small coding mistakes, and while it is often a pain to find and fix them, it's better to do it now than present a broken site to the public.

8 Launch

Show your website to the public.