

Researching front-end frameworks

What is a front-end framework?

A front - end Framework is a framework that contains building blocks for developing web applications. It makes it easier for developers to create fast, responsive and sustainable websites.

I will be looking at 4 popular front-end frameworks and explain what they are and also include some pros and cons.

Below are the 4 frameworks I choose to research

- Bootstrap
- foundation
- React.js
- Angular

Bootstrap

Bootstrap is a popular open-source framework. Bootstrap is used to make fast and responsive websites and UIs.

Bootstrap is a collection of handy reusable bits of code written in HTML, CSS and JavaScript.

Some reasons for front-end developers to use Bootstrap:

- Time saving
Because Bootstrap has ready made blocks that are use-ready, and you can apply to your website without writing all of your code from scratch. Also, Bootstrap had ready-made themes and templates you can use.
- Easy to use
You don't need a high level of knowledge of HTML CSS and JavaScript to get started with Bootstrap
- Bootstraps final result always look the same on every platform and every browser. So you don't have to spend time on making your website responsive.
- Bootstrap offers a grid system to create your page layouts.
- A lot of community support

Some cons of using Bootstrap:

- Every Bootstrap website looks similar, so you will have to pay some attention to making your website stand out
- It has a learning curve. You will have to spend some time getting familiar with this framework.
- Can be heavy for the user in terms of slowing down loading times.

How to get started

You can copy a stylesheet link for bootstrap that you can find on the Bootstrap website, You could also download files locally to your project folder. After downloading Bootstrap or copying the link, you will link it inside the <head> tag of your HTML.

Bootstrap comes with a predefined grid of rows and columns, so you place your website components into the grid.

Once you have included Bootstrap in your project using any of the above methods, you can use all the components available in bootstrap easily.

Foundation

Foundation is a family of front-end frameworks to make it easy to design beautiful responsive websites, apps and emails that look good on any device.

Foundation includes code snippets you can use for your website.

Some pros of using Foundation

- The Foundation allows you to customize your site without having to use other sites like Foundation. The CSS design outside the box is more of a graphic design that looks great right away, without even requiring much customization.
- Flexible grids
- Widgets like HTML5 form verification

Some pros of using Foundation

- Less community support compared to Bootstrap
- Beginners will need some time to learn Foundation
- Lack of broader support such as quality control websites.
- Not a lot of QA sites for problems

How to get started

- Go to foundation.zurb.com and click Download Foundation 6.
- Pick your installation type
- Extract the compressed file
- Include the HTML and CSS properties at the beginning of your projects (in the head)

ReactJS

ReactJS is a JavaScript library for building user interfaces. It lets you use compose complex User Interfaces from small, isolated pieces of code. These pieces of code are called components.

Some pros of using ReactJS

- You can reuse code components.
- It uses a virtual DOM which makes the UI faster
- One way data flow, which makes it less error-prone and gives you more control over your data
- A big community, which means there are a lot of online resources.

Some pros of using ReactJS

- ReactJS is in a constant stage of development, which makes it hard to keep up with the high pace of development
- It only covers the UI layers of the app and nothing else, so you will still need other technologies to get complete your project.
- Poor documentation
- It's a library and not a full framework

Angular

Angular is a front-end web development platform that operates as a JavaScript framework. Angular is not to be confused with a JavaScript library, like jQuery.

It offers a collection of components that simplify writing, altering and using code.

Some pros of using Angular

- Supported by google, which makes it a dependable program.
- Offers fasted load time
- Elements and modules are customizable.
- A lot of online tutorials and recourses

Some cons of using Angular

- Not up to par with SEO (search engine optimization).
- Difficult to learn.
- Angular can weigh down in terms of size and complexity

Which framework did i chose and why?

I selected Bootstrap because I'm interested to see how I can use it to style my website. I think i twill be useful later on and I can apply the knowledge later on.

Bootstrap has more community compared to Foundation. Because it's such a popular framework, I think I will come into contact with Bootstrap anyway while developing my web-development skills and knowledge.