

Project Scope

The scope for the prototype's main project is to create full stack, front and back end, application which allows users to communicate with drawings instead of text, as well as the ability to comment on and share those drawings with groups.

Why Bootstrap Was Chosen

Bootstrap was chosen to prototype the application, as it provides incredibly fast utility based CSS creation. This kept the amount of CSS that had to be written to a bare minimum, as most of general styling issues could be fixed by adding more classes to components.

While it isn't strictly a prototyping tool, it is used for the same functional reason as one, which is to create a bare-bones site as quickly as possible, which allows for ease-of-use for developers who are more suited to back-end systems.

It also didn't come with the pain that OnsenUI had with its development, as JavaScript functionality is mostly optional with Bootstrap, which allowed understandable systems to be used instead of poorly documented and confusing libraries.

How Bootstrap Handled HTML, CSS and JavaScript

When handling the front end site, bootstrap handled well and did not run into many issues. One of the attractive elements of Bootstrap is the requirement, or lack of requirement, to use Bootstrap's JavaScript systems. Many layout frameworks will require the use of JavaScript to function correctly, however Bootstrap's use of JavaScript is non-intrusive and optional.

CSS is hardly required when using Bootstrap, as much of the functionality of writing CSS is included within the Bootstrap classes. In the rare cases that CSS is required, bootstrap's use of numbered padding means that making custom CSS mesh with Bootstrap is incredibly simple. p-1 will always refer to 0.25rem, p-2 is 0.5 and so on. This is something that other layout frameworks can often lack on, using a variety of different padding sizes and margins which are different for every element, and leads to difficulty when trying to fix layout issues.

HTML is one of Bootstrap's weakest points, unfortunately. When using Bootstrap, the HTML files in which it is used in are often incredibly messy, due to the amount of class names which are required, and the lack of semantic elements (some semantic elements are forced to be display-block or display-inline, which prevents flex on bootstrap).

Reuse of Components

Some list components were created in code using JavaScript, by generating the HTML using Element class objects. This is similar in functionality to JavaScript frameworks such as react and angular, so when those frameworks are put into practice the templates already used for vanilla JavaScript can be re-utilised for use in JavaScript framework libraries.

Licensing

Like many UI Frameworks, Bootstrap is an open source project which is managed by hundreds of thousands of developers on Github. Due to the code of Bootstrap being readily available to the public, it would be difficult for the Bootstrap Core Team to add licensing or costs.