

For the front-end we need to think and consider options to use.

When choosing these frameworks, it is important that they continue to be supported in the future as Adroit wants to use them to build upon this R&D project. We should also be choosing frameworks which will make it easy to build upon.

As we are not building this customer facing (currently) the business requirements, ie functional requirements may be more important than having a beautiful aesthetic. Though if we choose to make it beautiful it will be easier to port to be business to business (B2B) which could be good for Adroit in the future.

## Front End Frameworks

- - React
  - React is very popular this means it is very easy for people to work on and not much upskilling is needed
  - Built in Typescript support
  - Can use Material Design with React
  - React's routing is frustrating
  - Has many libraries available including data visualization
    - <https://recharts.org/en-US/>
    - <https://www.npmjs.com/package/react-chartjs-2>
- - Angular
  - Native built in Typescript support
  - Built in routing
  - Large size which may hinder performance
- - Svelte
  - Typescript support does not appear to be as good.
- - Vue.js
  - People on reddit say that Vue is better than React & Angular
  - Lacks heavy virtual DOM so better performance.

Design Frameworks

We have the option whether we choose to use pre-build frameworks for components or to build them ourselves. For this we need to think about what components we will need for this project.

- Material Design (<https://mui.com/>) (Material UI for React)
  - Material Design is very popular and is predictable to use.
  - Responsive support
  - Makes it easy to use as has built in components
- Tailwind CSS
  - Low bundle size - faster
- Daisy UI (Framework built on top of Tailwind CSS)
  - If we are using Tailwind CSS this will speed up the development process
  - Easy to customize the theme/colors, this means it is easy for us to change the look and feel in the future
- Bootstrap
  - Looks boring
- Ant Design

**The client would like for us to use Typescript**