Sockets

A key part of my project is collaborative connectivity. This will require some form of networking between a client’s browser, a server, and to potentially an unlimited number of other clients. To do this I will have to use sockets, and have decided to use <https://socket.io/>. This makes it easy and efficient to have real time communication between the whiteboard and server.

Socket.io allowed real time, bidirectional event-based communication between a client a server. It uses node.js as the server. It makes a webstocket connection but if it can’t, it will use a HTTP long poll. It provides a reliable connection despite any firewalls, proxies, or load balances as it starts with HTTP long requests, and then will try to use websockets to get a faster connection.

React

Another important part of my project will be the UI. My goal is to make it minimalistic and stylistic. To do this in a feasible way, aswell as a considerably less bloated and complicated way, I have chosen React to assist. React is a javascript library which makes it much easier to build UI’s and reuse components. It will allow me to make the front-end much quicker, as well as to a higher standard.

React is a component-based method of creation UI’s allowing me to easily reuse components I make keeping for a consistent theme as well as make the whiteboard have mobile support. Whilst mobile support is not, currently, an aim of mine React makes it much more feasible.

<https://link.springer.com/article/10.1007/BF03217471>

<https://vtext.valdosta.edu/xmlui/bitstream/handle/10428/1252/beeland_am.pdf?sequence=1&isAllowed=y>