Technology stack outline

Here I am going to outline the various technologies that I intend to use for this project

Front-End.

For the front-end of this project I intend to use the following web technologies

Polymer: *https://www.polymer-project.org*.

The polymer project is a platform for developing web components and building web apps using web components. I have some experience using Polymer as I used this to develop a dashboard during my time in Google Zürich. I will be using the LitElement library from the Polymer project.

TypeScript.

To avoid the dynamic typing of JavaScript I will be using TypeScript. TypeScript is a strongly typed superset of ES6 JavaScript. TypeScript transpiles to JavaScript. Polymer does not directly support TypeScript so this will be an interesting exercise to get the two to behave together.

CodeMirror: *https://codemirror.net*.

CodeMirror is a library for developing text editors in the browser. My team at HackMIT used this to develop the editor for our Muse language (*https://github.com/EoinDavey/Muse*). This is a powerful library that will make writing the text editor easy.

Back-End.

The back end will likely be built on the following technologies

Go.

This project will use the Go language for all back-end development.

Docker.

The project will utilise the modern approach of containerisation, to package the project for easy deployment on servers and cloud services

Kubernetes (possibly).

Kubernetes (k8s) could be used to deploy the web app in the most scalable way, using automatic scaling and load distribution.