Tool-Choices

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1 Introduction

This document outlines Tool Selections for creating the Multidimensional Web Plotter and their justification

1. **Typescript** JavaScript is the standard language for creating software on the web. By using Typescript- which compiles to JavaScript, it is possible to have a full type system to keep a codebase organised and cut down on errors with type safety and other features.

2. **WebGL** WebGL is a standard for graphics on the web based on version 2.0 of OpenGL. Unlike webGL2 which is based on OpenGL 3.0, the older version has greater support among more types of devices without newer graphic drivers.

3. **No Graphics Framework** Options like Three.js can be used to abstract a lot of the graphics development but It is decided that use of it would be avoided mainly to gain experience of working on a lower level, and to have grater control of development.

4. **Svelte** Svelte is a Front end Framework that makes it easy to add interactivity to a web app, something that this application will very much need. It was picked for it's great performance due to the already performance demanding nature of the project.

5. **GitHub** GitHub is a cloud based version control system built on git with lot's of extra project management functionality. It is picked mainly due to familiarity with it's use.