TomTom API

To target the points in the mark scheme, I decided that I needed some form of mapping API. I googled around for some and found this site <https://nordicapis.com/5-powerful-alternatives-to-google-maps-api/> . I then looked at the TomTom site, <https://developer.tomtom.com/> and believed it had some good documentation that I could follow. Initially, I could get basic maps working, however, beyond that I could not get the features I wanted to work correctly (markers). Due to the lack of users’ using this API, it was difficult to find a forum posts or something akin to that, therefore, I scrapped that idea and moved to the Google Maps API.

Google Maps API

Following on from the TomTom API, my google maps implementation using the Maps JavaScript API worked as planned and would be considered a success to me, although not overly complicated. By following the documentation, <https://developers.google.com/maps> , as well as some helpful google searches, the API was embedded smoothly and did not cause any issues. My only regret would be that this API costs more than the TomTom API, however, for its usage here, it is not an issue.

Pusher

To fulfil the RIA section of the mark scheme, I decided that I wanted to add web sockets to provide real time updates as and when changes were made. I created my account and went to the documentation/get started sections <https://pusher.com/docs/channels/getting_started/javascript> , I could push messages from pusher console to front end, however, I could not figure out how to develop server side pusher capabilities. I went to their library page <https://pusher.com/docs/channels/channels_libraries/libraries> and saw their CodeIgniter library <https://github.com/darkwhispering/pusher-for-codeigniter> , I followed this however learnt quickly that since it is 6 years old, it was outdated and did not work. By going to the official channel library <https://github.com/pusher/pusher-http-php> , I learnt that the issue was with the vendor install location. After some testing with installs, I managed to get it to work however after some time, as I took a break from trying to get it to work in between.

Ajax

This was a huge success for me as I had minimal issues with getting Ajax to work correctly. I managed to create a dynamic search and dynamic deletion of items. I found the CodeIgniter documentation helpful for this <https://www.codeigniter.com/userguide3/search.html?q=Ajax&check_keywords=yes&area=default> . It provided useful information on built in functions, etc. This link <https://makitweb.com/send-ajax-request-codeigniter/> was helpful for me to understand how Ajax requests work as I had not done the previous web module.

MVC

The MVC aspect I think went very well. My entire project, front and back uses the MVC structure to send and receive data, often linking MVC results to pages and using that page’s data to do complete more MVC request, like MVC request chaining. The CodeIgniter documentation was helpful as I regularly used it to understand this framework <https://www.codeigniter.com/userguide3/index.html> . Moreover, I would often browse forums and view YouTube videos to understand certain concepts, for example, pushing data to the database, or how to link the database.