# Future Improvements

## **Community Events Map**

Here, you will find my limitations, bugs and future improvements.

## **Project Limitations**

Whilst my app works as intended, there are a few bugs which need to be addressed, some of which have been mentioned in my User Guide. Although this isn't a stable version, I'm happy with the outcome given the time constraints I faced.

Most of the bugs are cosmetic, this is due to me focusing on the functionality of the app and using Material UI to quickly make the assets/components.

The details of the bugs are as follows.

## Existing Markers/New Markers

When clicking on an existing event or creating a new event, a smaller info window box also appears. Although this is very much a cosmetic bug, it still interferes with the user experience with having to clear the window.

This seems to be an issue with my onClick event handler which I will need time to look into. If given more time, this is something I'd be able to debug and find a solution.

## Device Responsiveness

My device isn't responsive across all devices, especially tablets. There's a lot of white space at the bottom of the map and filter. On mobile devices, the map is very elongated and could be reduced to prevent the user from scrolling.

## Dashboard Page

The dashboard page isn't a protected route which means whether you're a logged in user or not, you can access the Map page. This could easily be rectified with the Protect Route from the react-router-dom library which would allow only logged in users to access this page.

#### Filtering markers

Although the events can be filtered in the sidebar, the markers don't reflect the filtered changes. As I had issues getting the Type Filter to work and display, this took up much needed time that could've been spent on getting the markers to reflect the filtered types. Admittedly, this would be something I would need to research and look into to resolve.

## **Future Improvements**

Besides the obvious bugs above, there are some further improvements that could be added.

- Reverse Geo-Location which the Google Maps API offers. This turns the
  coordinates into an actual address, this could then be added to the event
  information providing exact location details such as the address. Along with this,
  there's the Places API that allows you to get detailed information of the places on
  the map such as parks, museums, galleries. This includes the rating and images
  of the place, this would then allow the User to rate and get a better idea of the
  place the event is taking place at.
- Adding a PUT requests to update existing events. This will allow the users to amend any mistakes made when creating their event and also if the time/location has changed. This would require the user to have their own unique bearer token generated by jsonwebtoken, ensuring that only the user who created their events can amend them.
- Adding recommendations to the user. If the user is only interested in particular events, then recommendations will appear based on their most frequented events/locations.