Development Testing

From the High Level Architecture Diagram, it is clear the most important aspect of the program is the map's get request as without a functioning map, this app is worthless. For this feature to work, there are multiple components to it, however, the crucial part is the integration between the two.

Starting off with the backend for this integration test, we have to make sure the get request for all the information from the Ecatalog Table is working normally. To test this, we use Postman to send the get request acting as our frontend, then, making sure our server receives the request to finally send the data. The expected output is the entries for the table in JSON.

Then for frontend, we have to make sure the get request is done properly. Although the backend is tested properly with Postman, it's still possible that the frontend will have communication errors with it. Luckily, React's fetch function can do get requests and catch any errors that the server may return.

Finally, it's down to the individual components of the map app to handle and utilise the data correctly. This is done by passing dummy data through the various components to make sure everything works and erroneous data to make sure they catch those errors.

There are many more cases that were tested:

Test Case	Test Purpose	Test Method
About Us popup	To make sure the popup works and it doesn't break other components as it changed the data type of what's in the toolbar..	Opening and closing the popup, ensuring the popup is showing the right info, and trying the other options on the toolbar.
Admin Functions	Validation of admin functions such as insert, update and delete. This ensures that only data with the correct types can be dealt with.	Adding non-empty text requirements and type validation to catch out incorrect data.