**My Learning Outcomes:**

Become more comfortable and continue to understand the standard working practices in the web development space, also working to find the most comfortable work style that suits me for web development.

I was looking to develop my understanding and use of PHP, like how to create and manipulate XML files with data we are accessing from other sources (ISO list of global currencies and Fixer API).

Understand how a RESTful application works and learn how to create one with error handling and CRUD functionality.

Get a better understanding of JavaScript as my knowledge is limited.

**How might the application be extended and improved?**

You could extend the application to provide data on how the rates of currencies have changed since the applications first use by creating a copy of the rates file with updated currency rates which could be used to compare to old saved files. This could be used in a graph for example to represent these stats. This could be provided as its own service that could be used alongside the original conversion app or on its own.

The application could be edited to allow for a CSV format option alongside XML and JSON.

You could implement a stock market API like “iextrading” to be used alongside the currency rates the conversion service provides.

The application could be tweaked to allow the user to change the base currency used for the rates calculation to any currency covered within the Fixer API.

An authentication service could be added along side the currency conversion service to aid with login functionality.

**How could the application and/or its components promote re-use?**

With the application being REST based and only having to use a few parameters, it’s a simple service to use which is an important aspect of any service when re-use is wanted to be encouraged.

The REST architecture means that this service can be easily integrated into another as a micro service, similarly to how we used the Fixer API to create the conversion service. So our conversion service will get reuse from being easily embeddable.

With the application having access to all the currencies in the ISO currency list the user can use CRUD functionality to make use of all the ISO recognised global currencies. The CRUD functionality is very useful and convenient to the user as they can modify the rates file with adding, deleting or updating any currencies that they need or don’t need rather than using a static list. It makes the application more personal to the user which will more than likely have the user reusing the application.