



The Problem Statement

An assortment of available software with various use-cases have become more accessible on the internet. Technology has changed over the decades and so has the change in referencing applications for academic writing. From what was once manually done by handwriting is now automated with a few types and a few clicks when citing references. The research project is about investigating and researching about academic referencing and developing an application for it. When selecting the appropriate software, the client met multiple issues with the available software found on the internet and ended up dissatisfied from what they had experienced. After investigating the matter, A proposal was made to produce an alternative for the client to suit their needs.

The Aim and Objectives

The aim was to develop a referencing application as a means to provide an alternative towards the surrounding issues that exist with the available referencing applications found on the internet. A singular referencing style (Vancouver) was used as a demonstration for the application project. The objectives were to develop a prototype for academic referencing and investigate the nature of academic referencing, what types and capabilities are available. This has been provided with the contribution of the client to meet expectations and recommendations followed by testing and evaluating for the overall research project.

The Design and Implementation

The application was developed using Visual Studio with C# as the chosen language with the benefit of the .NET Framework. Main features included Newtonsoft.Json, another framework used for serialising and deserialising data in a JSON file format.

The early design used a mock-up as a rough concept before designing it into a wireframe for prototyping and as a blueprint. Flowcharts were used to show the process of the application between functional and non-functional requirements. Applying design principles such as Nielsen's Heuristics and Dix's HCI provided methods of recognising usability or testing the application for a reasonable UX and quality in UI design. These design principles would be carried out to the client for testing the aspects (data entry, save and load, copy and other functionalities) for feedback.

The Testing

Two main tests, Usability and User Accept Testing (UAT) was performed by the client to identify the application while they are being observed and analysed by the developer. After the tests were done, questions were provided with quantitative and qualitative feedback to gain insight.

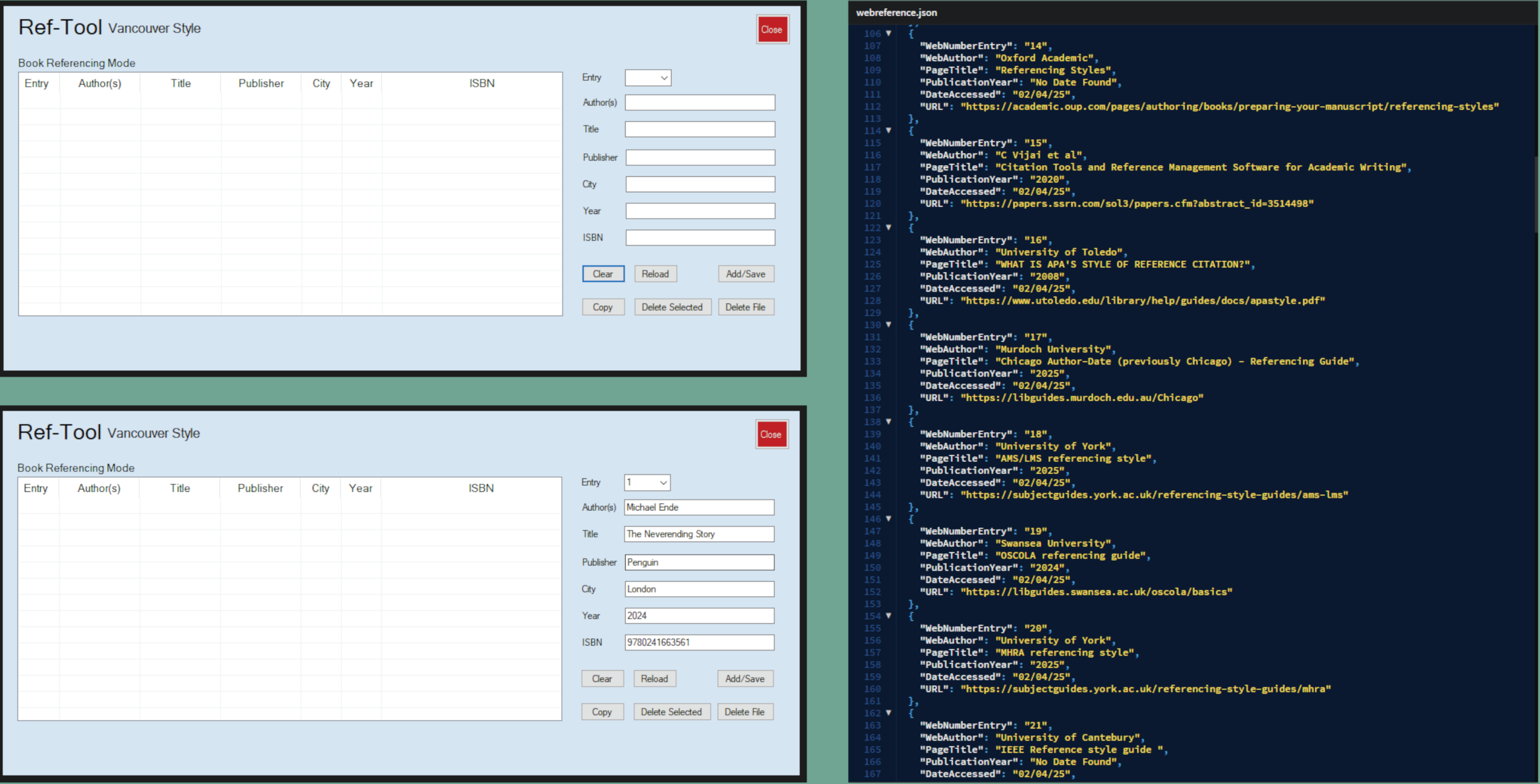
The feedback turned out positive with a few areas to be considered. The expectations and outcomes included suggestions and acknowledgements that the client provided has highlighted the areas of the application, it's issues or errors that would all be collected, evaluated and recognised for finalisation of the project.

The Conclusion

The development of the application provided an understanding by exploring referencing styles, tools and overall exploration for the project. Aside from researching about referencing, the exploration of programming with the use of C#, .NET, JSON and existing resources to make the application a possibility.

Communication with the client by providing tests were crucial to achieve and outcome that the developer may not entirely see and has been proven from the report of both tests. Client requirements were mostly met through the application with features, functions, testing, observation and interview post-testing.

From the aim and objectives at the start, the application as a prototype would be a success. The reality is that the application itself has met most of the requirements that the client wished. Communication and collaboration with the client has played a crucial and important part in establishing expectations and understanding to evaluate, mitigate issues, solve problems, finalisations and gaining user satisfaction.



1 [1] Michael Ende. The Neverending Story. Penguin. London. 2024. 9780241663561