Poster

# Objective

The objective of our Android application was to provide a means for users to improve their learning of Te Reo sentence structures, specifically on negatives (ehara and kahore).

This will provide students with a portable resource that can be easily accessed and that complements existing classroom resources.

# Technology

# Conclusion

Our application has met the specifications of the scope within the allotted time frame that was given to us.

The client is pleased with the design and functionality of the app.

The main issues we overcame, involved the process of teaching ourselves how to properly work with Android studio and implementing a database using SQLite.

We have set a solid foundation for the next team to continue working from, along with thorough documentation of features that need to be added or improved upon during the next iteration.

Handover Document

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# Technology

Android studio was the development environment we were designated by the supervisor to use for developing our application. The programming language we developed that application with was Java, which is supported by Android studio and that we were already familiar with it due to previous assignments.   
Android Studio's platform is fully supported by Google, which brings in Android tools such as debuggers, emulators, and wide documentation. The layout editor on the software allowed for the ability to drag-and-drop Ul components, the preview of layouts on multiple screen configurations, and more. Android Studio is an official tool of Android, so any updates to development features were automatically made available.

For the purpose of using a database that does not require a server to be used, SQLite, an open-sourced, lightweight, and standalone database which supports embedded relational database features was used as the backend database for our application. Android Studio has a built-in SQLite database implementation and it was helpful for the application data.

Because SQLite is embedded within the code, this presented an issue of not being able to view and manage the data. To work around this issue, we downloaded a DB browser.  
In order to access the data through a DB browser, we need to save the database SQL file in the application as a DB file. Then drag that file to the DB browser so we can view the data. This process needed to be run each time we made changes to the database.

For repository and backup purposes, Whitireia's GitLab repository manager was used. This enabled us to work collaboratively and access the files of the project through a single source. And allowed for easier documentation, testing, and kept track of the application's versioning. In order to upload files to GitLab, we needed to manually copy the files to a GitHub account that was connected to the project on GitLab.

The hardware we used to develop the application were HP laptops provided by Whitireia which were already installed with Android Studio. We were also provided with two LG Nexus 5 smartphone devices which were used to test our application.

Google drive was used to store the proposal, system documentation, presentation, poster, and application files. This allowed us to easily edit documents and keep the secure.

Slack was used to send code between us. It was helpful for when multiple team members were working on code and one of us needed to see a specific section of code that the other was working on.