**Manu – Alpha**

*Since Beta*

Since our beta release, we have added three new quizzes: Sound to Name, English to Māori, and Māori to English. We have also added a stats screen which records your scores in the quizzes, and a credits screen which credits the sources who provided the photos and sounds. Additionally, we have added ambient sounds to the menu screens and feedback sounds in the quizzes (for correct/incorrect answers). Our infographics/encyclopaedia page now has a fact and endangerment status for each bird along and the popups now show the birds’ photos as well as play their bird songs in the background.

We have maximised, where feasible, our Code Coverage. However CodeCov does complain about “BirdDatabase.kt” having a lot of partially covered lines, but all the code is covered in our tests. We have been unable to do UI testing so all Kotlin scripts of the form “[A-Z,a-z]\*Activity.kt” are not covered. However, we have comprehensively covered the logic in all other scripts.

*Additional*

We have completed a Code Review which is discussed in “Reports/Code Review.pdf”.

We also used Android Studio’s profiler for performance and code profiling. We wrote about this in “Reports/Code Profiling.pdf”.

We added an encryption function so the user cannot tamper with the file containing their game scores. This is important because it is a desirable file to edit and could be a huge problem should we pursue any online leader board functionality (e.g., if your scores were kept locally until you reconnected to the Internet). This functionality is in “StatsAdapter.kt”.

While our gestures were present in the beta, we have combined them with a sliding activity transition to make it more intuitive.