Manu - Release

Bug to note – There is a bug where sound will not play out of the emulator. This issue is prevalent in different forms between a lack of ambient sound to no sound at all, however we have confirmed that all sound is working within the deployed app on our phones (Samsung A70, OS: One UI version 3.1). You may or may not encounter this within the emulator, however the final product on phones don't have this issue and are working as intended.

Since Beta

Since *Manu*'s beta release, we have worked on debugging and polishing our app. Here is a list of the main things we worked on.

- Updated the sound quiz to make it look and behave nicer.
- Added bird names to the encyclopaedia overview.
- Fixed the player quiz stats functionality.
- Added a comprehensive credits scroll.
- Polished other small aspects.
- Squashed bugs picked up during user testing and informal testing. Please see "Reports/Assignment 4, Feedback Writeup.docx" for details.
- · Acted on user feedback to change various things.
- Ensured everything was well documented.

Additional

We changed many of the photos to ones which give us the rights to use them commercially. The previous photos had ambiguous rights – we could have used them, but they were difficult to credit properly. In an effort to maintain ethical standards, we made the decision to swap the photos for clearly commercially licensed photos. This involved collecting and displaying the licences and sources on our credits screen. This means we have the right to publish our app and its contents.

We updated our player statistics storage mechanism to use the built-in preferences class. This is automatically encrypted, and since it is better maintained, it is likely to be more secure. It is also less likely to throw issues compared to reading and writing to files manually.

To prepare *Manu* for the Google Play Store, we have written "App Store Page/Google Play Store - App Page Information.docx" which contains the content which would appear in the store page for our app. We went over an app's page on the store to find what we would need to provide.

Future

We wish to publish *Manu* to the Google Play Store and the Apple App Store. Please see "App Store Page/Google Play Store - App Page Information.docx" for our draft store page. We have not been able to submit our app because the licences we had during beta were not adequate, but we have since rectified this.

The first thing we would work on are the scaling issues we have on very small devices or phones with a huge font size. This messes up our layouts. We would create dynamic layouts that react to different system font sizes, aspect ratios, and resolutions so it is as compatible

with as many devices as possible. This would be easier on Apple devices since there is a small, limited selection of screen sizes.

We would also like to update our player stats page so they can compare their average scores with that of the globe using Google Play's leader-board API.

With respect to publication, we would contact the Zoology and Ecology departments at the University of Otago, and the Department of Conservation regarding interest and publicised endorsements.