**Daniel - TOOLS AND TECHNOLOGIES**

The software required to develop Versatile Fitness consists of:

* Android Studio package version Bumblebee 2021.1.1.
  + Version 7.1.0 of the Android Gradle plugin
  + Android Emulator v 31.2.8 which emulated a Pixel 2 with API 29
  + Android SDK platform-tools v 32.0.0
  + Android SDK build-tools v 33.0.0 rci
* To stress test the app we used the X86 Emulator Accelerator (HAXM installer) v 7.6.5 which is an extension of the Android Studios emulator.
* Firebase version 29.1.0 was also used alongside Android Studios for some components of the application.
  + Firebase cloud messaging
  + Firebase RaelTime Database
* Navigation component of Jetpack was used for fragmenting the elements within the app.
* Notepad++ V8.3 was used for code testing prior to implementation.
* Physical testing was conducted on a Huewei P30 Pro with API 30 and developer mode unlocked. USB debugging was used in conjunction with Android Studios on this device while physical testing occurred.

Versatile Fitness was targeted for API 29 but will work on any newer API. The oldest SDK that will run the app is version 17 which is Android v 4.2 Jellybean. All the above listed software is free and does not require a license; however, a Google Play account is needed to work with Android Studios, which is also free. Of the members in our team, Bryce has used Android Studios the most with around 100 hours of experience. Bryce, Daniel and Hannah all have experience with various programming languages including, Kotlin, Java and Python. Specifically, Bryce has a Kotlin certificate in intermediate Android app development from Udemi, Hannah has completed multiple university level programming courses using a variety of languages, and Daniel is studying Introduction to Programming at RMIT which uses Python. The Xbox gamebar app which comes standard with windows 10 and 11 was used to film the app run-through artefacts. Bryce has extensive experience using the Xbox gamebar app with over a thousand hours of World of warcraft streaming.