

## **QUICKMUSIC—ALL-IN-ONE MUSIC TOOL**

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QuickMusic is a multifunctional music tool for musicians as well as those who play and/or study music. Tools for musicians do exist on smartphones but are rather scattered. This project attempts to gather most used features among music tools so that users need only one single app for their multiple needs in interacting with music. QuickMusic consists of three features, Metronome, Pitch Detector, and Music Note Player, and a game PitchPerfect. Metronome counts and plays the beats at a given tempo; Pitch Detector tells the frequency of the recorded sound and identifies the music note that the sound corresponds to; Music Note Player allows users to play any notes from a list all 88 music keys on a piano; PitchPerfect first lets users record a short audio and then plays the recorded audio with different speed or with one of the four preset sound modulations. A senior project for Computer Science, QuickMusic is application coded with Swift on XCode and works on iOS devices such as iPhone, iPad, etc.