PSYubdul Productions presents:

# The Better Instrument Tuner

## User Manual

**Symoom Saad and Abdul Wahid's ICS4U Summative Summary**
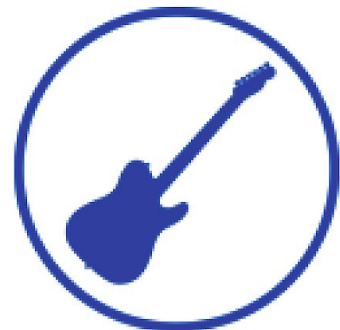
# Table of Contents

**Overview**

  Thank you, valued customer, for purchasing the better tuner. With this app by your side, you can finally harness and utilize the full potential of your instrument by accurately tuning them. For weeks, our team has been hard at work; engineering this innovative product. In PSYubdul Productions, we strive to give our customers a quality product and make it our goal to give our users the best experience while using our product. To ensure that you have the best possible experience while using our product, please follow our comprehensive guide below.

**How to Install**

  To review and run The Better Tuner, you will need either a beefy computer or any computer and an android phone. Either way, you will need to install Android Studios in your computer.

*Step 1: Install Android Studios*
  Android Studios (64-bit): https://developer.android.com/studio/index.html
  Android Studios (32-bit): android-studio-ide-171.4443003-windows32.zip
  Android Studios (Mac): android-studio-ide-171.4443003-mac.dmg

*Step 2: Run the application and then Import the project to Android Studios*
  You can import the project that has been provided to you through File > New > Import Project.

*Step 3: Set up Virtual Device (Skip this step if Step 4 interests you more; Doing step 4 is highly recommended as it isn't as demanding on your computer)*
  You can do this through Tools > Android > AVD Manager which will pop up a window. Click the 'Create New Virtual Device' button on the bottom left to go to another window. Search for either Nexus 5 or the 5X and then click next. Download the recommended API 27 and then click next then finish.
  You can also follow along this tutorial: https://www.youtube.com/watch?v=3UNlzsfTqi4
Note: If you encounter an error that has something to do with virtualization, you can just open BIOS and then enable Virtualization Technology form there. Try looking in System Configuration or following along this tutorial: https://www.youtube.com/watch?v=zIm7f5Epd9U

*Step 4: Set your Android phone up to run the app (Skip this step if Step 3 interests you more)*
  You have to first enable developer options in your phone by tapping on the build number of your your phone 7 times. This can usually be found in Settings > About phone. More information in: https://www.greenbot.com/article/2457986/android/how-to-enable-developer-options-on-your-android-phone-or-tablet.html
You have to then enable USB debugging through Setting > Developer options > USB debugging and then finally connect your phone to your PC via charging cable.

*Step 5: Run the application*
  After performing either step 3 or step 4, you can finally run the application through Run > Run 'app' and then selecting your prefered method of running (check under Connected Devices for phones and Available Virtual Devices) and there you go! You now have the power to harness and utilize the full potential of your instrument by accurately tuning them!

**How to Use**

Step 1: Before running the app, you need to allow the app to access the microphone. You can do this through Settings > General > Apps > BetterInstrumentTuner > Permissions and then check off microphone. **IF YOU FAIL TO DO THIS, THE PROGRAM WILL KEEP CRASHING.**

Step 2: If this is the first time running the program, pressing the Information button on the top right corner is not the worst idea (Figure-1 and Figure-2).

Step 3: To access an instrument, click on their respective images button. The left button with a blue silhouette guitar is for a guitar and the right button with a blue silhouette violin is for a violin (Figure-2).

Step 4: Play your instrument in a really quiet environment and follow the instructions until you reach 'Perfect!' for that string. Repeat till you have done this will all of the strings for your instrument (Figure-3).

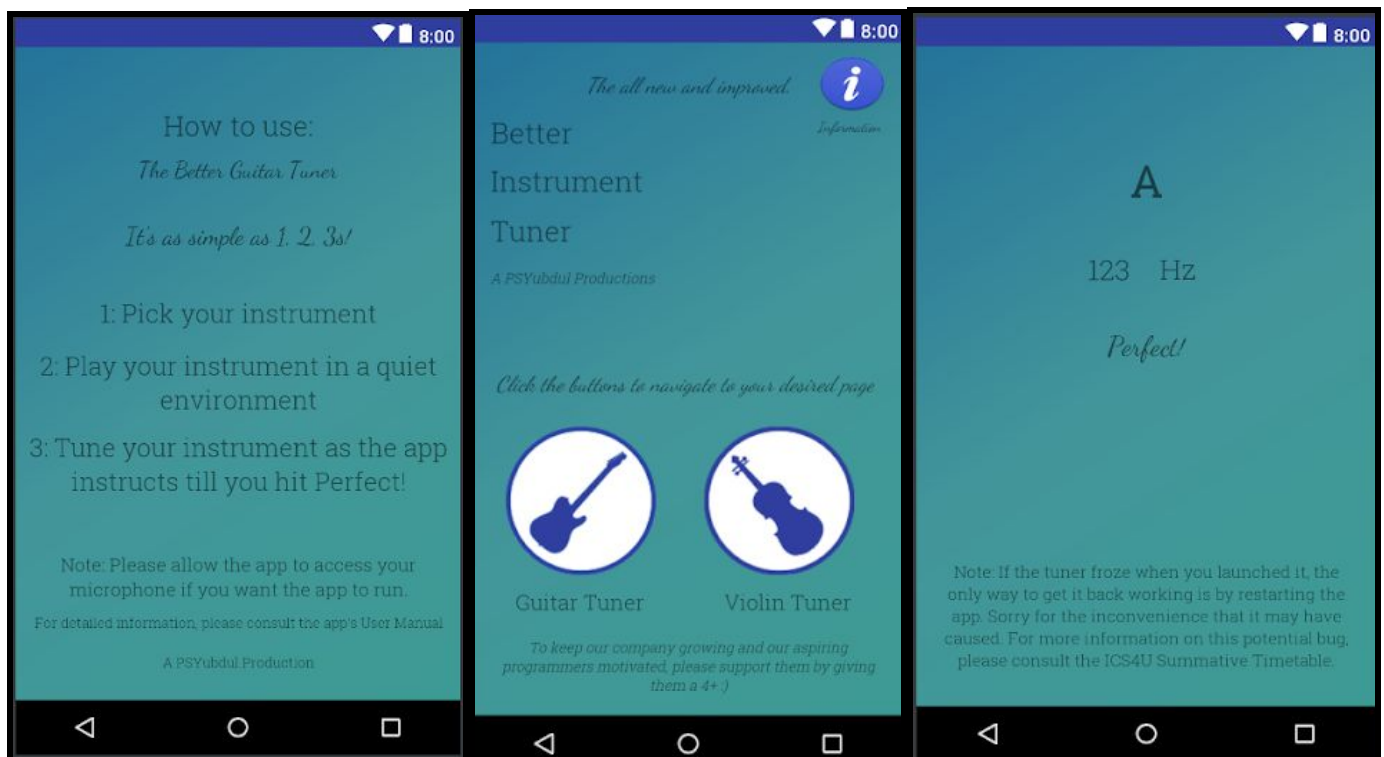And there you have it! Your instrument is now perfectly tuned! You can exit the application now.

|  |  |  |
|---|---|---|
| Figure 1 | Figure 2 | Figure 3 |

**Disclaimer**

There is a bug in the program where the program will suddenly stop working. When that happens, please restart your application and try again. This will solve the issue. We apologize for the inconvenience that it may cause. For more information, please consult: ICS4U Summative Timetable. You can find relevant information about this bug near the end of the document.



**Credits**

All of the credits go to these aspiring duo programmers: Symoom Saad and Wahid Abdul Rahim. They did everything from scratch; from coming up with the idea to polishing up the finished product. All of the praises go to them and their intellectual ICS4U teacher: Mr. Creelman. Without him, the duo would probably not have pushed themselves as far as they could have to come up with this amazing program. That being said, we acknowledge that nothing is perfect and we encourage everyone to report their criticism to the complaints department (points to the garbage can).