Recording Preferences Settings

In the original Hum Application there was an option to make two recordings for 5 seconds each. The said recording called an impulse. In a real world scenario the user should be given the freedom to choose the recording time and duration of the recording. In the following implementation the user was given the option to make changes to the following parameters:

1. Start Time from now -> this decides when the application should start recording. It is implemented as a spinner in android with the option to record immediately, after 1 minute, 2, 5, 10, 30, 60 minutes. More values can be added later according to convenience.
2. End Time from Start -> this decides for how long the application should do the recording. It is implemented as a spinner in android with the option to record for 1 minute, 2, 5, 10, 30 and 60 minutes. More values can be added later according to convenience.
3. How often to Record -> this decides for how long should the recording be made. The ability to decide when to record and when not to from the start to the end time of the recording is provided by this spinner implemented in android. It has values ranging from 10, 60, 300, 600 seconds with the option to add more.
4. Duration of recording -> this decides the duration of the recording. The Android recorder is active during this time and the recording captured is stored and analyzed. The recording duration have the following options 5, 10, 30, 60, 120 and 300 seconds with the ability to add more.
5. Threshold -> this decides that the recording should be made only if it is above a certain threshold. The threshold values are denoted with strings as *Barely Audible, Very Low, Low, Clearly Audible, Loud and Very Loud* with their mathematical interpretations as 0, 5000, 10000, 15000, 20000, 25000 in magnitude out of a max value of 32767. This field is currently not being used and can be implemented in the future iterations of the application.
6. Use Calibrated Values -> it is implemented as a switch in android with the following values -> *yes* and *no.* The toggle gives user the ability to decide whether the calibrated recordings should be used or not.
7. Store Original Sound -> it is implemented as a switch in android with the following values -> *yes* and *no.* In the previous Hum Application's implementation a recorded sound could only be played from within the application using the Android's inbuilt classes. If triggered to yes, it generates a file which can be played from the Android directory's graphical user interface.
8. Turn GPS On / Off -> it is implemented as a switch in android with the following values -> *yes* and *no.* If this is triggered to yes, the user provides us with the consent to store the latitude and longitude values of the place where the recording was made.

Once these values are saved, the customizable values are used to make recordings according to the user's wishes.

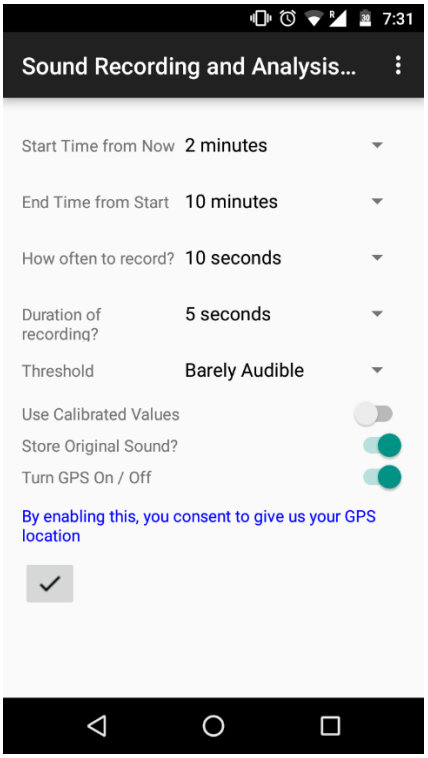


Figure 1

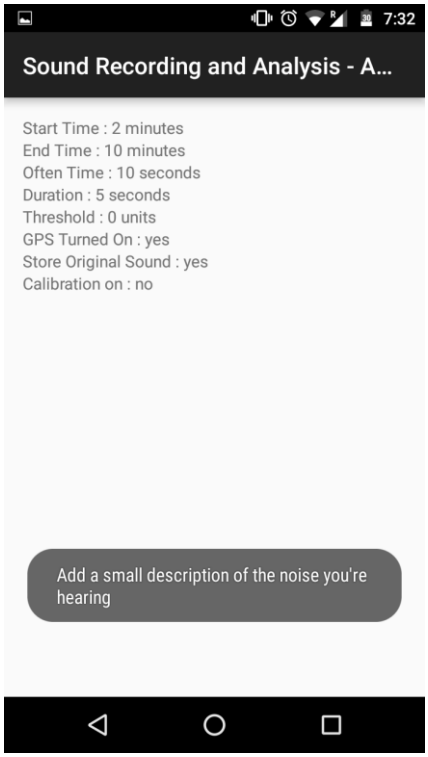
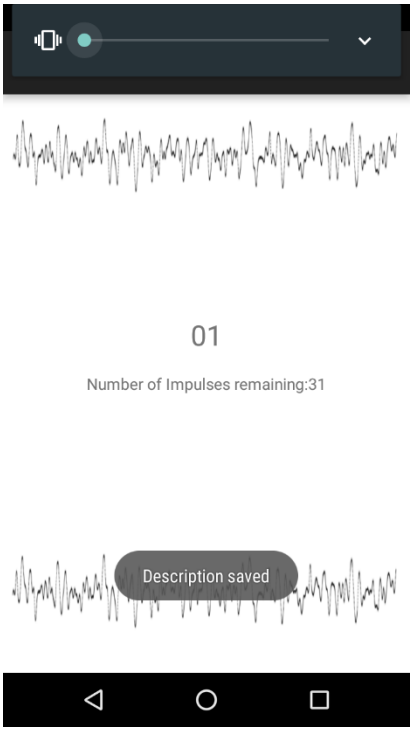


Figure 2

The preferences that can be selected From the screen.

Once the preferences are saved, they Apply until they are changed again.



Once the changes are applied the values chosen under the preferences section are now used to capture recordings.

Figure 3