How to Turn Your Old Android Phone into a Home Monitoring System

By Maxwell Timothy

If you have an old Android phone lying around, there are a bunch of pretty useful projects you can do with it. Android devices come with sophisticated hardware and software that can do a lot of amazing things if you find the right app.

One of such projects is setting up a makeshift home monitoring system. You don't need any special hardware or prior experience with home security systems. All you'll need is your old Android and two apps from the Play Store. Want to see how? Let's get started.

A Makeshift Home Monitoring System

There are a lot of sophisticated home monitoring systems you can purchase for your home. From the <u>simple ones that help you keep track of your pets</u> to those that can detect burglary or stream live events, there are a lot of options in the market.

However, if you're up for a simple DIY home monitoring system that costs you nothing to set up, this could be a perfect project to try out. It doesn't promise a five-star performance, but if you get everything right, it should be a very interesting setup to have at home. It's one of the interesting uses <u>you can put an old android device to</u>.

What Do You Need?

- 1. An old Android phone preferably running Android 7 or older.
- 2. Google's Live Transcribe and Notification app.
- 3. An automation app like Tasker, IFTTT, or MacroDroid (we'll use MacroDroid).

Setting Up Google's Live Transcribe and Notification App

The Google "Live Transcribe and Notification" app is where most of the heavy lifting will take place. The nifty little app can detect and identify a wide range of sounds. From animal sounds like barking, burglary related sounds like glass breaking, to fire alarms and baby cries, the app has you covered.

To set up the app:

 Download the Live Transcribe and Notification app from the <u>Google Play</u> <u>Store</u>. Once downloaded, install it and grant all the necessary permissions. Depending on your phone manufacturer and Android version, you may

- already have the app installed.
- 2. Exit the app.
- 3. Open the Settings app on your phone, locate and tap on **Accessibility** > **Sound Notification** and toggle on Sound Notification. Simply search for "accessibility" in the "search settings" input box on newer versions of Android.
- 1. Tap the back button to return to the Accessibility permission screen.
- 2. Scroll down to locate and tap on **Live Transcribe**.
- 3. Toggle on Live Transcribe. A button will appear at the bottom of your screen, unless you're using a newer version of Android.
- 1. Tap the floating Accessibility button that appears on the bottom of your screen to open the live transcription UI. If you didn't see any, simply launch the Live Transcribe app.
- 2. Snap your finger, whistle, flush a toilet, play some music and try out several other sounds to test if the app is properly configured. Also, say a few words to see if it gets the transcription right.

If you've followed the steps accurately, the app should label each sound with a considerable amount of precision. With this, you're clear to proceed.

To get notifications on your phone whenever it detects a sound of interest, you'll need to turn on and select the sounds you want it to notify you of. Do this within the Live Transcribe and Sound Notification app like so:

- 1. Open the **Sound notifications** screen from the Live transcribe and Sound Notification app. The Sound notifications screen is different from the live transcribe screen. You need to be on the Sound notifications screen as shown in the first screenshot above. If you are in the live transcribe screen, click on the setting icon in the bottom left corner of the screen and tap on **Open sound notifications**.
- 2. Click the setting icon in the top right corner of the screen.
- 3. Toggle on the switch besides **Sound notifications are paused**. If it says **Sound notifications are active**, leave it untouched.
- 4. Next, tap on **Sound notifications are active** to reveal the sound notification preferences screen.
- 5. Toggle on the switch beside the sounds you want to receive notifications about. E.g. toggle on the switch beside **Baby sounds** and **Dog barking** if you want to receive an SMS on your phone anytime your dog barks or your baby cries when you're away.

Setting Up MacroDroid

Up next is setting up the MacroDroid app. MacroDroid is an Android automation app that you can use to automate a wide range of Android tasks. It uses a trigger-action operational model whereby it executes an action in response to a predefined condition, or trigger. For instance, you can program the app to text your child's number a "return home" SMS at 6 PM every day.

In this project, we'll be using the app to extend the functionality of the Live Transcribe and Notification app. The Live Transcribe app doesn't come with a remote notification feature. Instead, you'll use MacroDroid to send remote notifications when your phone detects a sound of interest.

To get started:

- 1. Install the MacroDroid app from the Play Store.
- 2. Launch the MacroDroid app and grant any requested permissions.
- 3. On your MacroDroid home screen tap on **Add Macro** and then the plus icon on top of the area labeled **Triggers**.
- On the next screen, tap Device Events > Notification > Notification Received > OK.
- 2. On the prompt that appears choose **Select Application(s)** and then tap **OK** > **Live Transcribe and Sound Notification**.
- 3. On the next screen, leave all the options untouched and hit **OK**. You will return to the MacroDroid home screen.

If you've reached this point, you've successfully set up the trigger for remote notifications. The next part is setting up the action to take when the condition applies. To do this:

- 1. On your MacroDroid home screen, tap the plus button in the top right corner of the panel labeled **Actions**.
- 2. On the next screen tap **Messaging > Send SMS**.

After carrying out the steps above, on the next screen:

- 1. Select a carrier and provide a phone number to receive the alerts.
- 2. Click the three-dot button next to the text input area labeled "Message Text." Select Notification Title and hit OK. Tap the button again and select Notification text and hit OK.
- 1. On the **Add Macro** home screen, type a Macro name (e.g Home Monitoring) on the space provided and tap the save icon beside it.
- 2. Hit the back button and tap **Save** to save your macro.
- 3. On the MacroDroid home screen, toggle on the switch in the top right corner to put MacroDroid in active mode.

With automation apps like MacroDroid, granting all required permissions is a big deal. Failing to do so might make using the app very stressful if not impossible.

To ensure the app has all the necessary permissions:

- Open the Settings app on your phone, locate and tap on Accessibility > MacroDroid. Toggle on the switch to grant MacroDroid Accessibility permissions.
- 2. Tap the back button and repeat the same process for **MacroDroid Volume Button Monitor** and **MacroDroid UI Interaction**.
- 3. Exit settings and launch the MacroDroid app once more.
- 4. On the home screen of the MacroDroid app, tap on **Settings** in the bottom right corner.
- 5. Tap on **Ignore Battery Optimizations**.
- 6. Locate the MacroDroid app and tap on it.
- 7. Select **Don't optimize**.

The path to accessing some Android settings may be different depending on the device manufacturer and Android OS. This post uses details from Android 6 and 7. It's generally better to use older versions of Android for the project.

Once you're done with the setup, place the phone in the general area where you want to detect sounds. It should preferably be close enough to areas that sounds are likely to emanate from. If you want to watch for baby sounds, keeping it in your baby's room should do.

If you have a Google-powered wearable device, you can add it to the Live Transcribe and Sound Notification app and get notifications on it.

What Can You Get From the Setup?

Depending on the battery life of your phone, you can get as much as 8 hours of nonstop home monitoring. You can re-purpose it as a baby monitor to watch out for baby cries, or a fire alarm monitor to watch out for fire alarm activations. You can even use it as an activity monitor to watch out for sounds like barking, door knocks, and running water.

Apart from SMS notifications, you can get notified via automated phone calls, emails, tweets, and many others. You can experiment with MacroDroid or another automation app to explore dozens of other functionalities that can improve your setup.

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