TalkToMe Part 2: Shaking and User Input

This tutorial shows you how to extend the basic TalkToMe app so that it responds to shaking, and so that the user can make the phone say any phrase s/he types in.
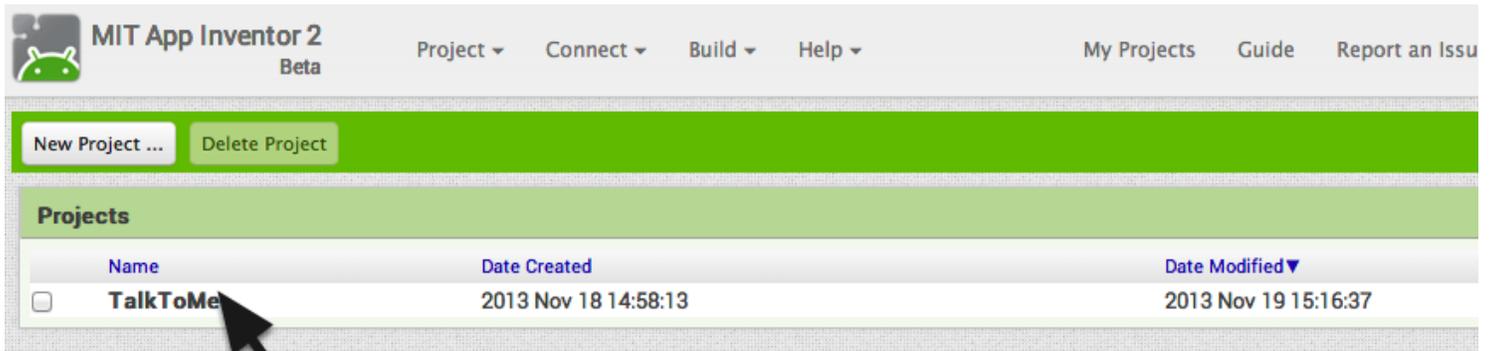
Go to App Inventor on the web and log in.

Go to appinventor.mit.edu and click "Create" or log in directly at ai2.appinventor.mit.edu.

Open the "TalkToMe" project that you worked on in the last tutorial.

App Inventor will always open the last project you worked on, so you may automatically be taken into your TalkToMe app.

Go to the Designer Tab

Your project may open in the Designer. If it does not, click "Designer" in the upper right.

MIT App Inventor
appinventor.mit.edu

Add an Accelerometer Sensor

In the **Sensors** drawer, drag out an AccelerometerSensor component and drop it onto the Viewer. (It's a non-visible component, so it drops to the bottom of the screen.) NOTE: emulator users should skip this part and proceed to the next section of this tutorial called "Say Anything". (The emulator can not respond to shaking!)

Go to the Blocks Editor

Click "Blocks" to program the new Accelerometer Sensor that you just added.

Program the Accelerometer Shaking event

Click the AccelerometerSensor1 drawer to see its blocks. Drag out the *when AccelerometerSensor1.Shaking do* block and drop it on the workspace.

What do we want the app to do when the accelerometer detects shaking?

Copy and paste the blocks that are currently inside the when Button1.Click event handler. You can select the purple block, then hit the key combination on your computer to copy and then to paste. You'll have a second set of blocks to put inside the when Accelerometer.Shaking block.
(Alternatively, you can drag out a new *call TextToSpeech1.Speak block* from the TextToSpeech drawer, and a new pink *text block* from the Text drawer.)

Tip: You can copy and paste blocks! Just use the same key combination that you use for copy and pasting text.

Change the phrase that is spoken when the phone is shaking.

Type in something funny for when the phone responds to shaking.

Test it out!

You can now shake your phone and it should respond by saying "Stop shaking me!" (or whatever phrase you put in.)
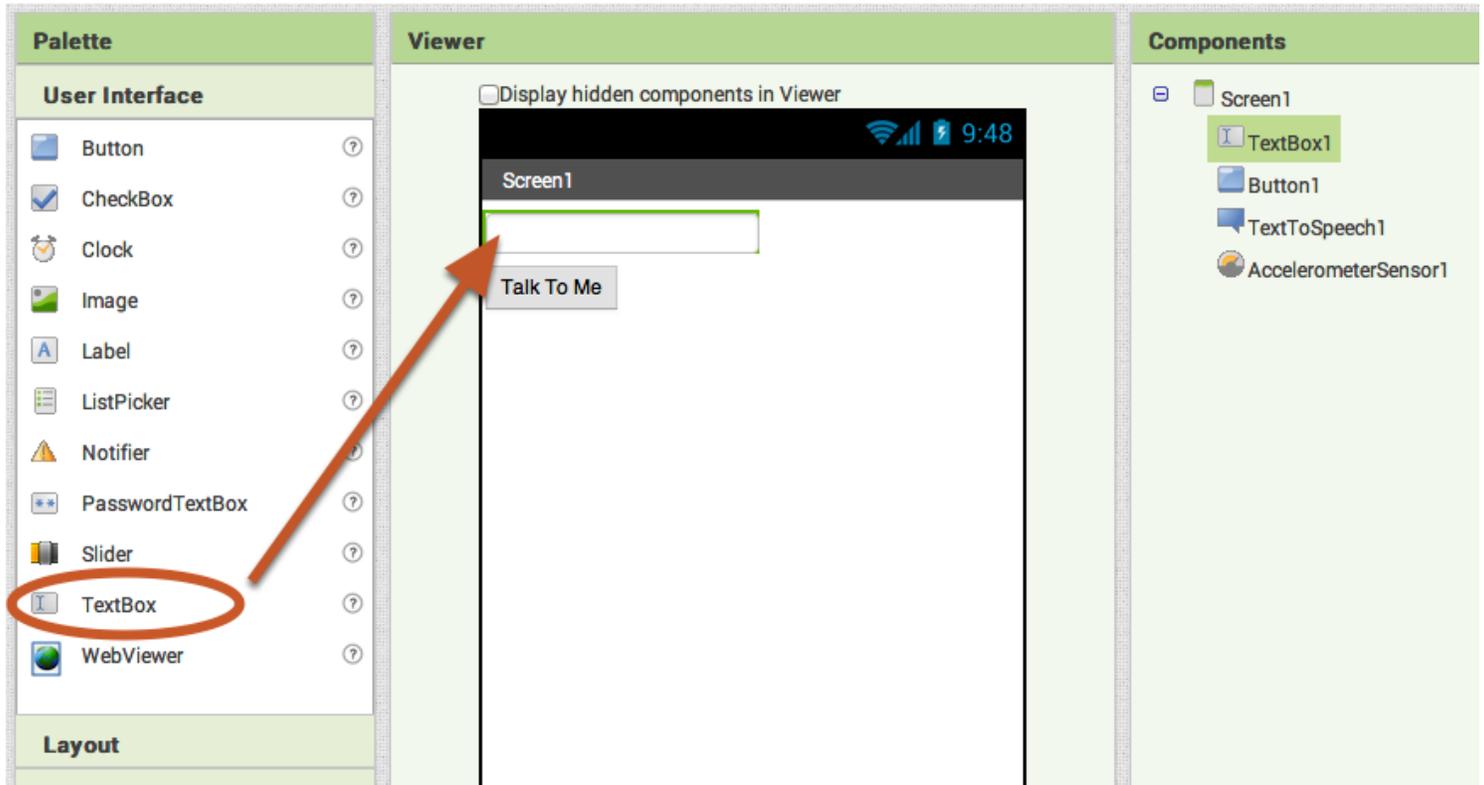

Say Anything

Is your phone talking to you? Cool! Now let's program the button click so that it causes the phone to speak whatever phrase the user put into the text box. Go back to the Designer.

Add a Text Box to your user interface.

From the User Interface drawer, drag out a TextBox and put it above the Button that is already on the screen.

Back to the Blocks Editor!

Get the text that is typed into the TextBox.

Get the text property of the TextBox1. The green blocks in the TextBox1 drawer are the "getters" and "setters" for the TextBox1 component. You want your app to speak out loud whatever is currently in the TextBox1 Text property (i.e. whatever is typed into the text box). Drag out the **TextBox1.Text** getter block.

Set the Button Click event to speak the text that is in the Text Box.

Pull out the "congratulations..." text box and plug in the TextBox1.Text block. You can throw the pink text block away by dragging it to the trash in the lower right corner of the workspace.
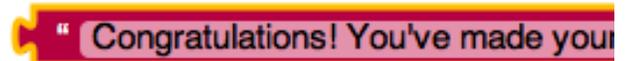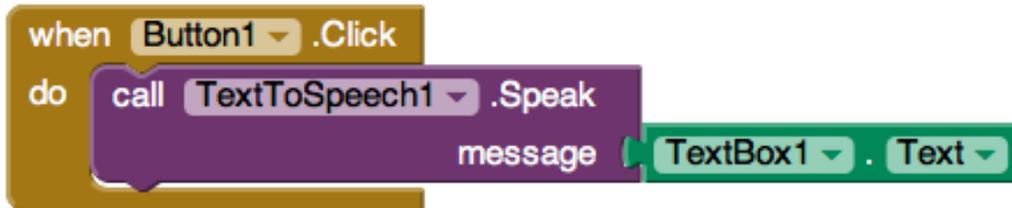
Test your app!

Now your app has two behaviors: When the button is clicked, it will speak out loud whatever words are currently in the Text Box on the screen. (if nothing is there, it will say nothing.)
The app will also say "Stop Shaking Me" when the phone is shaken.
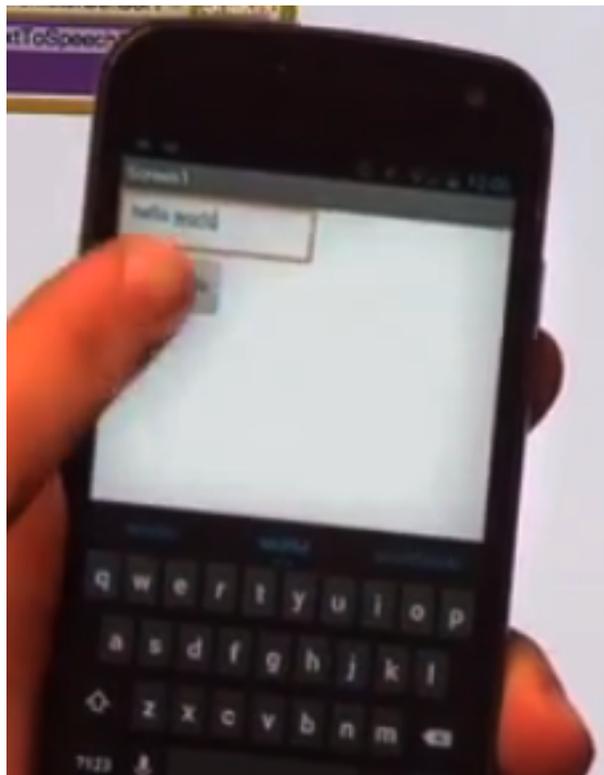
Congrats! You've built a real app!

Give some thought to what else this app could do. Here are some ideas for extensions:

- Random phrase generator
- Mad Libs - player chooses noun, verb, adjective, adverb, person and it picks one from a list that you program.
- Magic 8 Ball App
- Name picker - useful for teachers to call on a student

You could also play around with Speech-To-Text. Have fun!