

“TALK TO ME” – Part 2

This step-by-step picture tutorial will guide you through making a “*talking app*”.

1

Open **Google Chrome** browser and type the URL <https://code.appinventor.mit.edu> in the **address bar** of the browser

Following Screen appears in response of the step 1

Welcome to MIT App Inventor!

Continue Without An Account

or

Your Revisit Code: - - -

Enter with Revisit Code

2

Click “Enter with Revisit Code” after entering your code.

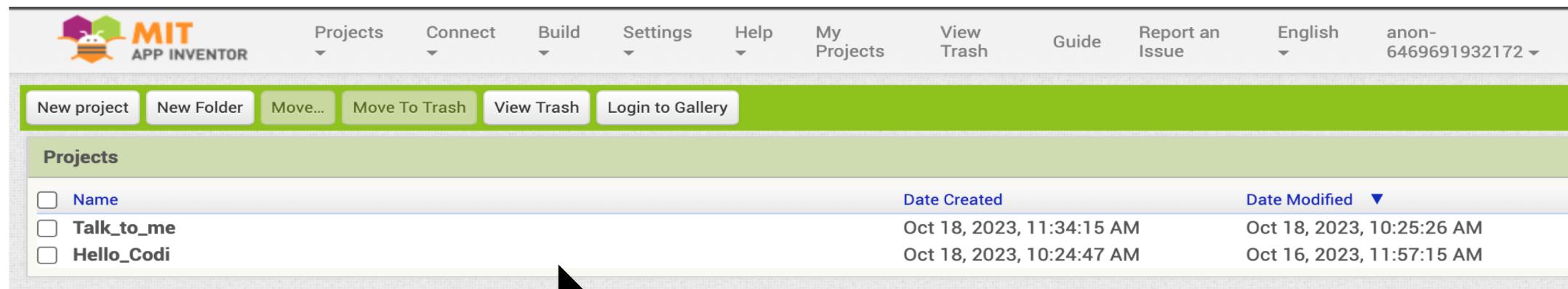


3 Open the “TalkToMe” project that you worked in the last lesson

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

Don't modify the code in the “TalkToMe” app that you have created.

Open the TalkToMe project Go to Projects -> Save project as and Name the projects as **TalkToMe Part2**
(Use underscore as separator Ex. Talk_To_Me_Part2)



The screenshot shows the MIT App Inventor web interface. At the top, there's a navigation bar with links for 'Projects', 'Connect', 'Build', 'Settings', 'Help', 'My Projects', 'View Trash', 'Guide', 'Report an Issue', 'English', and a user ID 'anon-6469691932172'. Below the navigation bar is a toolbar with buttons for 'New project', 'New Folder', 'Move...', 'Move To Trash', 'View Trash', and 'Login to Gallery'. The main area is titled 'Projects' and lists three projects: 'Name' (Date Created: Oct 18, 2023, 11:34:15 AM, Date Modified: Oct 18, 2023, 10:25:26 AM), 'Talk_to_me' (Date Created: Oct 18, 2023, 10:24:47 AM, Date Modified: Oct 16, 2023, 11:57:15 AM), and 'Hello_Codi'.

After opening the app confirm whether the name change took place. Now, click at “Designer” to design the app.

Go to the Designer Tab

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



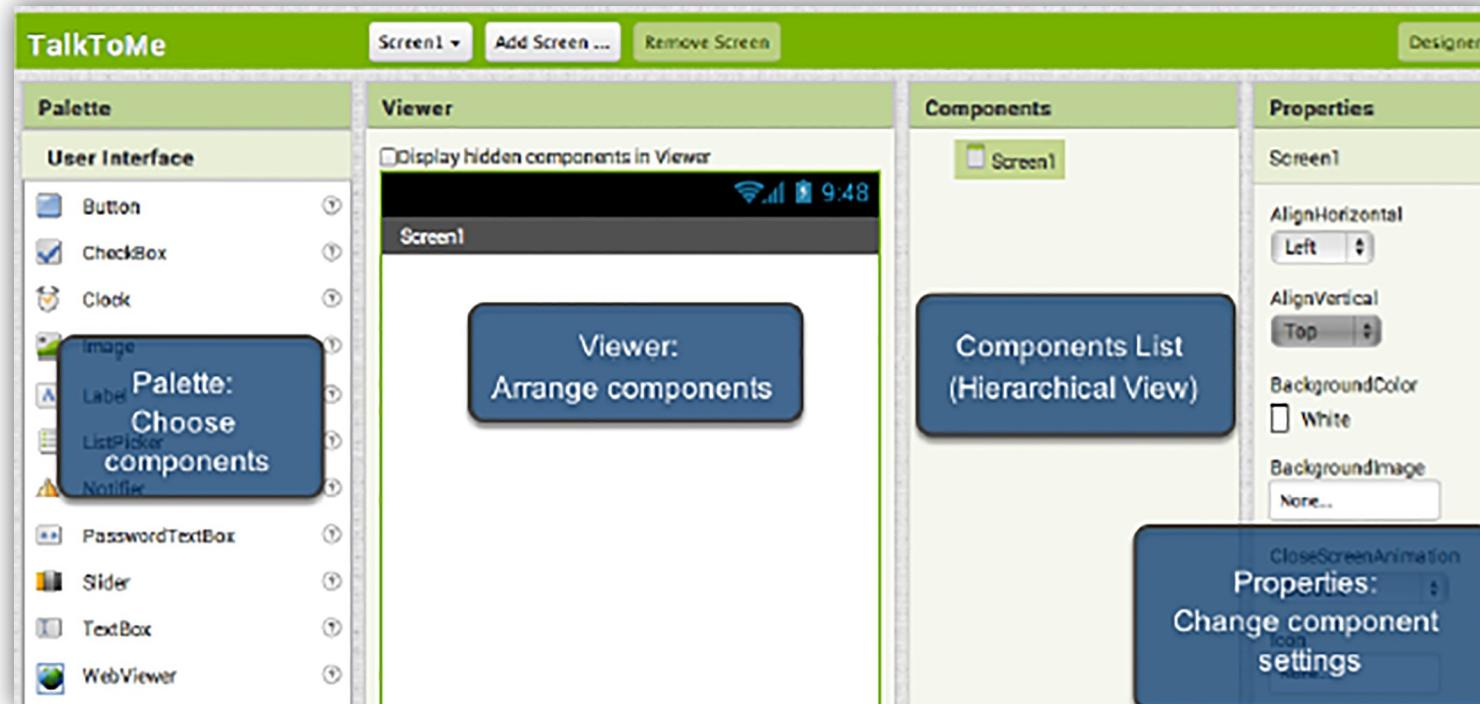
The screenshot shows the MIT App Inventor interface with the 'Blocks' tab selected. In the top right corner, there are two buttons: 'Designer' (which has a black arrow pointing to it) and 'Blocks'. The background shows a light green workspace.



Designer Window

App Inventor opens the Designer window

The "Designer" is where you create the Graphical User Interface (GUI) or the look and feel of your app. You choose **components** like **Buttons**, **Images**, and **Text boxes**, and functionalities like Text-to-Speech, Sensors, and GPS.



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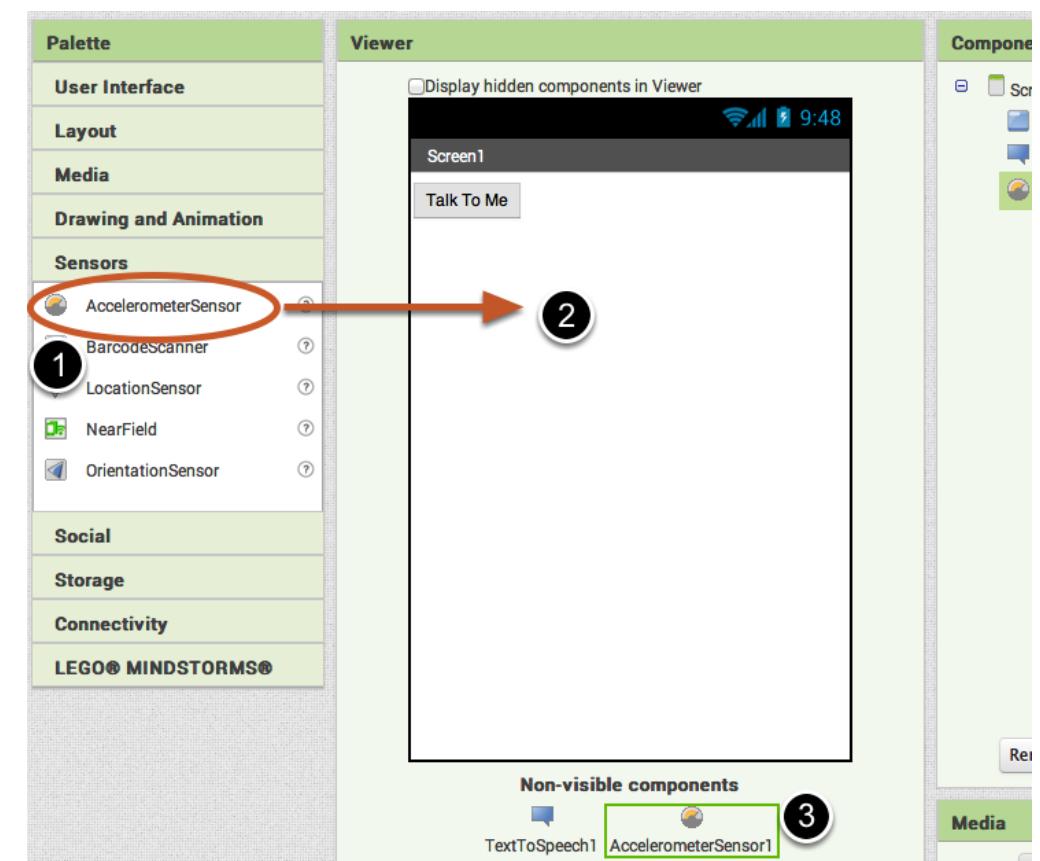
Add an Accelerometer Sensor

In the **Sensors** drawer, drag out an **Accelerometer Sensor** component and drop it onto the Viewer.
(It's a non-visible component, so it drops to the bottom of the screen.)

What is an Accelerometer?

An accelerometer sensor is a **tool that measures the acceleration of any body or object in its instantaneous rest frame.**

Key Applications of Accelerometers Digital Devices: Accelerometers in smartphones, digital cameras, and other mobile devices are responsible for rotating the display based on the orientation you hold it.





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Switch over to the Blocks Editor

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



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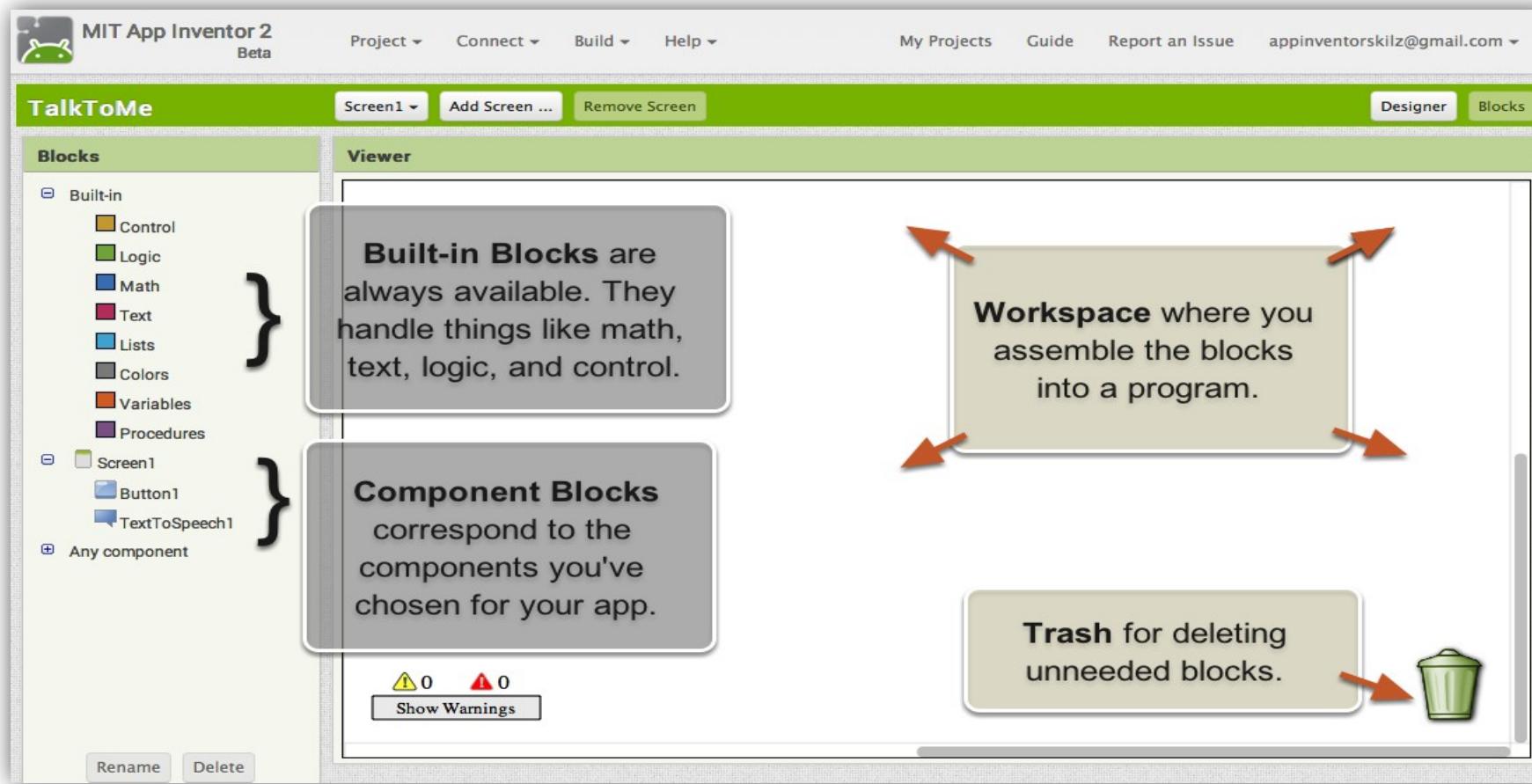
Program / Code the Accelerometer Shaking event

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

The screenshot shows the MIT App Inventor interface. On the left, the 'Blocks' library is open, displaying various categories like Built-in, Control, Logic, etc., and components like Screen1, Button1, and AccelerometerSensor1. The AccelerometerSensor1 component is circled in red. On the right, the 'Viewer' workspace shows a script starting with a 'when AccelerometerSensor1 .Shaking do' block. This block is also circled in red, and an orange arrow points from the library version to the workspace version.

The Blocks Editor

There are Built-in blocks that handle things like ***math***, ***logic***, and ***text***. Below that are the blocks that go with each of the ***components*** you add to your app. (*In order to get the blocks for a certain component to show up in the **Blocks Editor**, you first add that component to your app in the **Designer**.*)

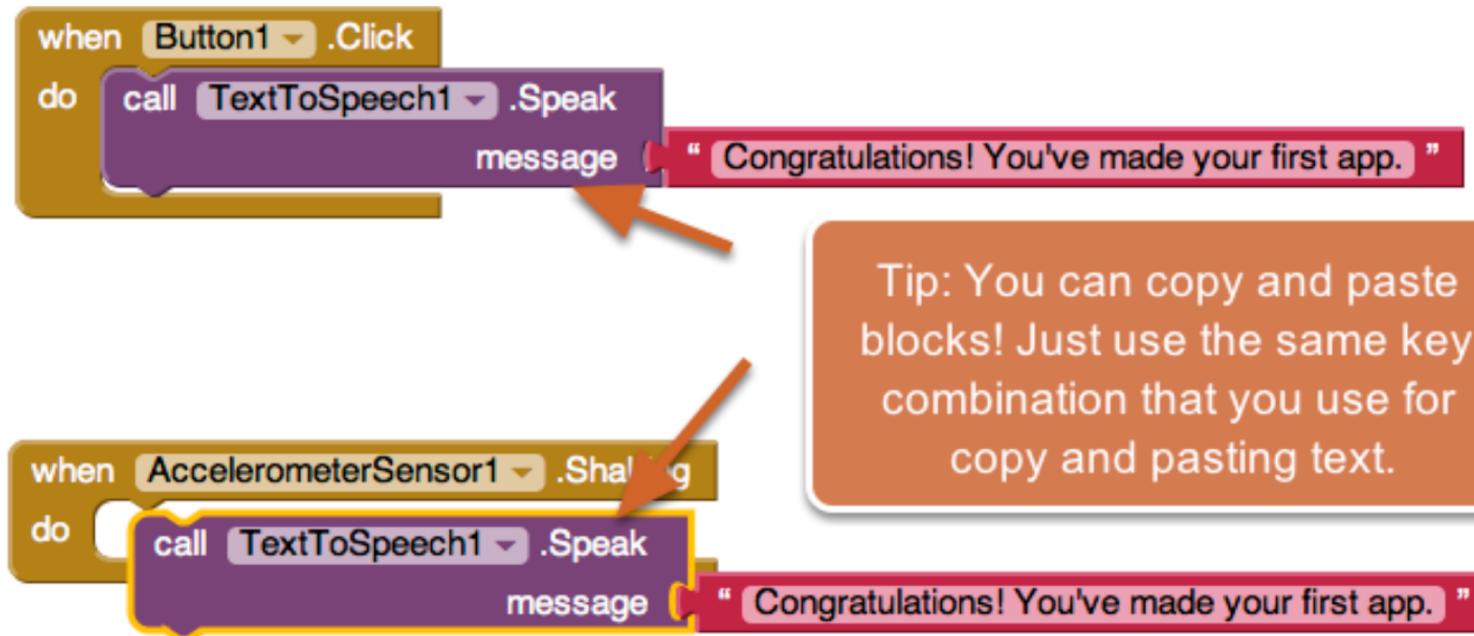


What do we want the app to do when the accelerometer detects shaking?



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.

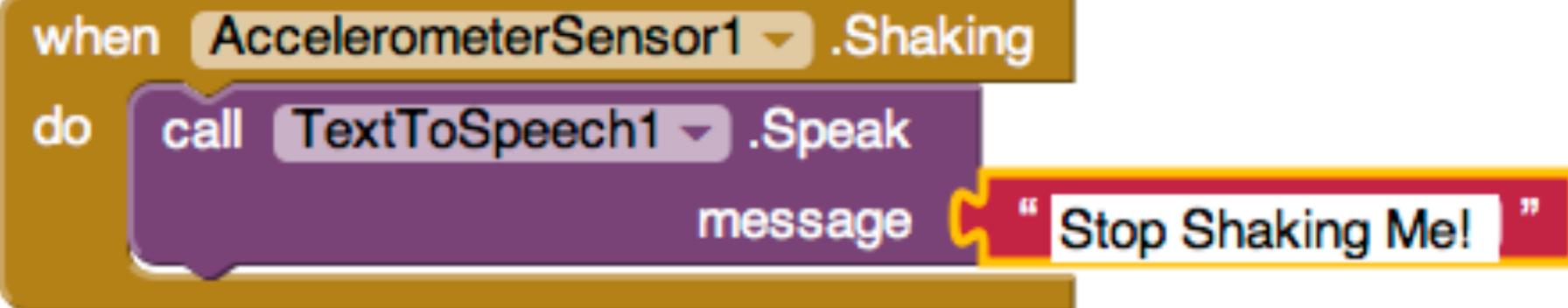
(Alternatively, you can drag out a new *call TextToSpeech1.Speak* block from the TextToSpeech drawer, and a new pink *text block* from the Text drawer.)



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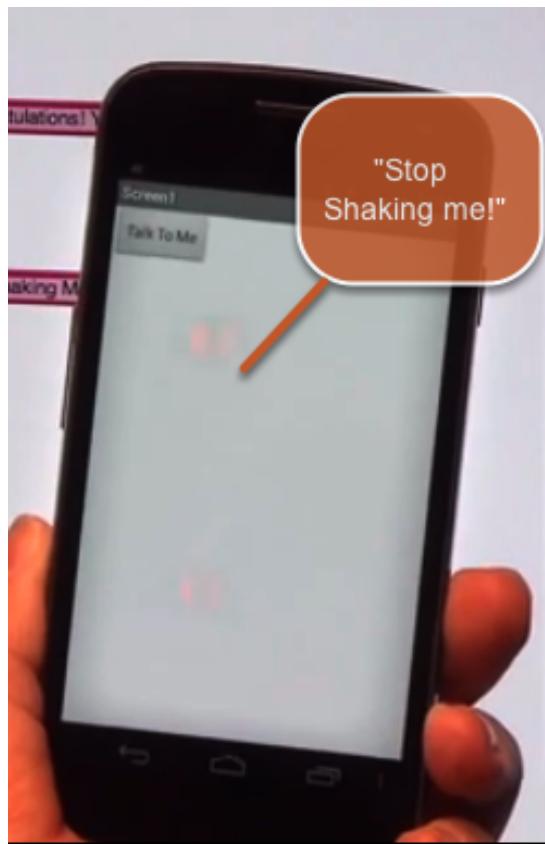
Change the phrase that is spoken when the phone is shaking

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.)



*****App ends here*****

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Say Anything

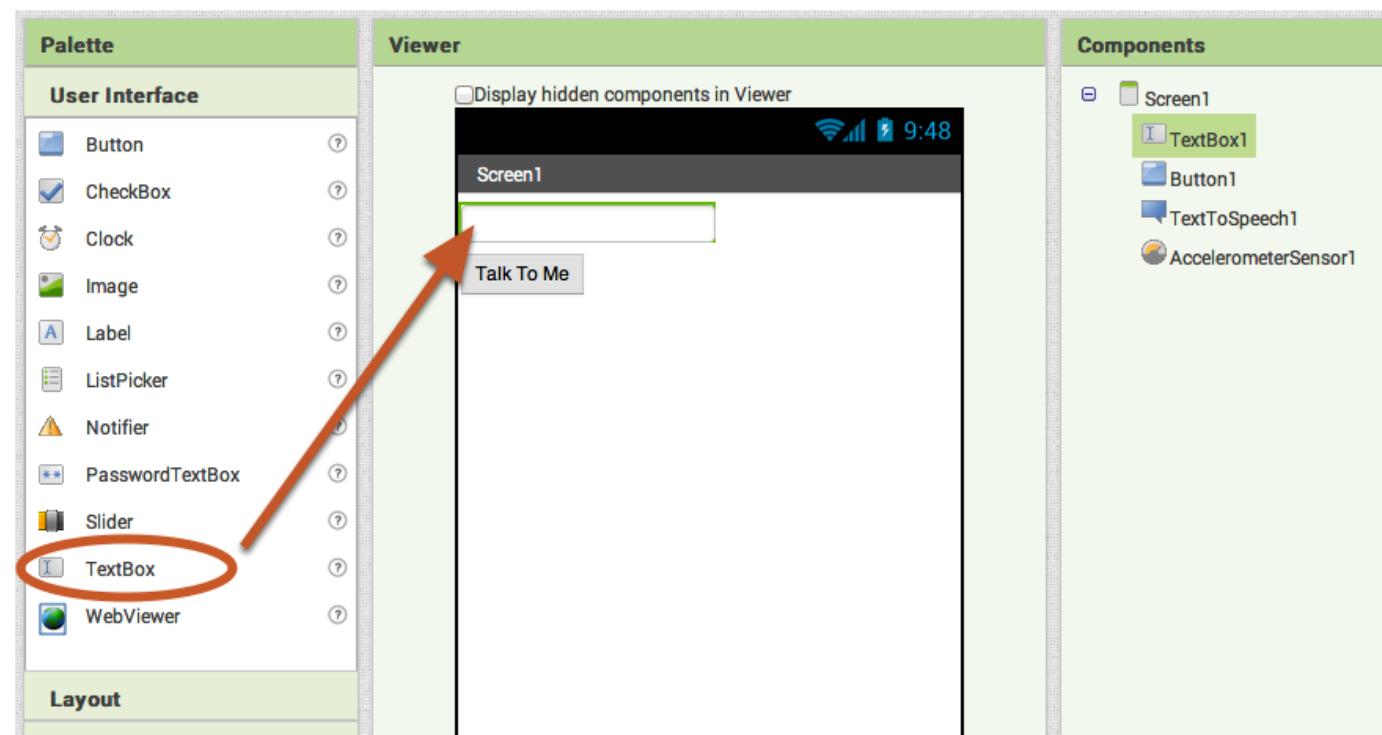
Now let's program / code the button click so that it causes the phone to speak whatever phrase the user put into the text box. Go back to the Designer.



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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.



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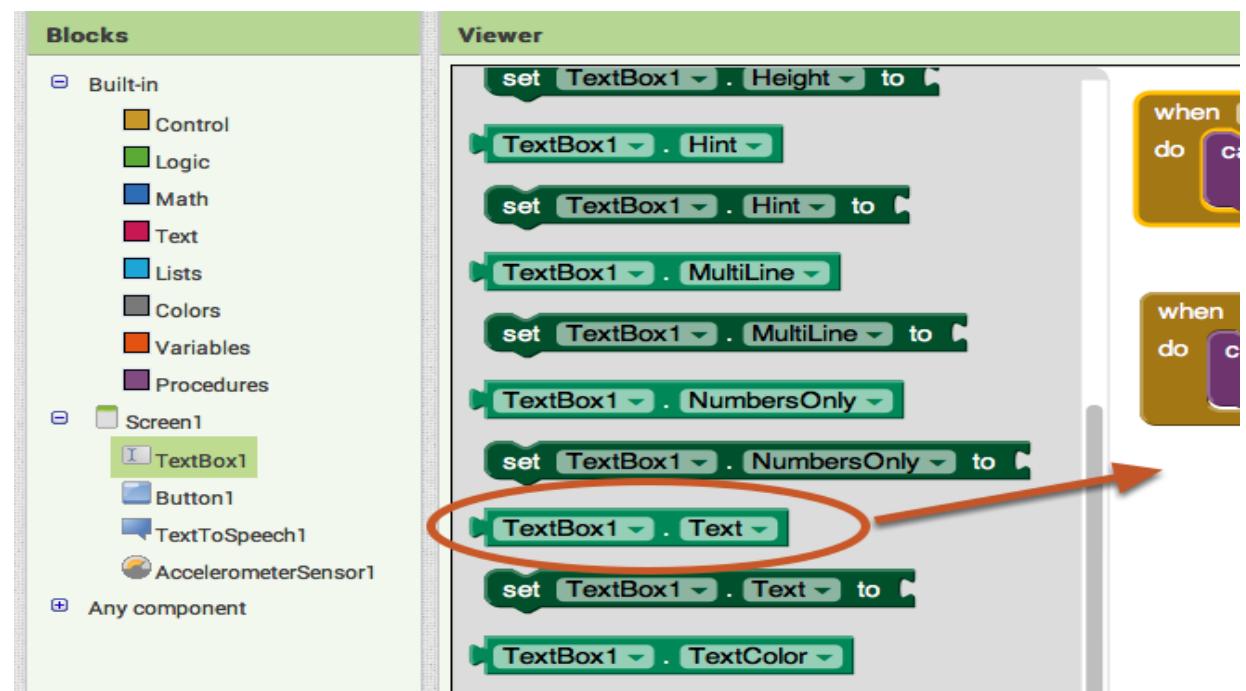
Switch to the Blocks Editor!



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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.



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

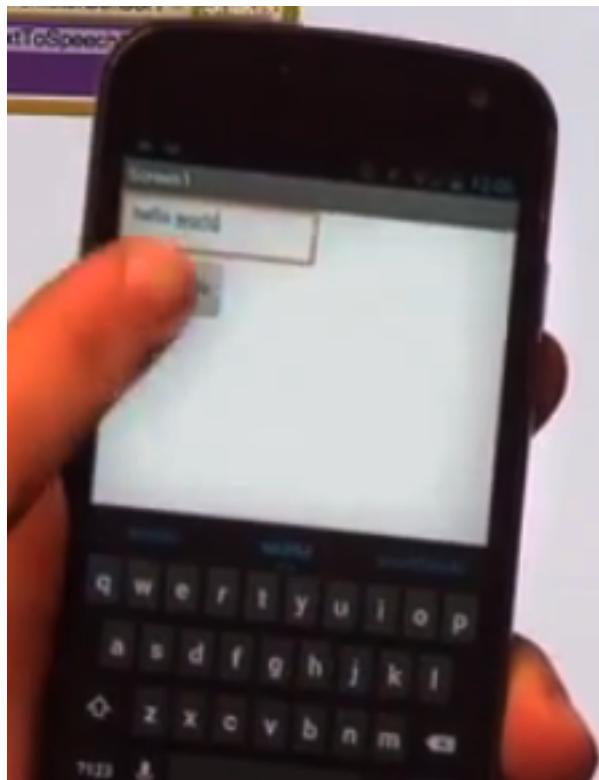


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Test your app!

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.



Great Job!