

## Steps for selecting components and setting properties

HelloCodi will have a **Button** component that displays the image of the bee you downloaded earlier. To accomplish this:

**Step 1a.** From the **User Interface** palette, drag and drop the **Button** component to Screen1 (#1).

**Step 1b.** To give the button the image of the bee, in the **Properties** pane, under **Image**, click on the text *"None..."* and click *"Upload File..."* (#2). A window will pop up to let you choose the image file. Click *"Browse"* and then navigate to the location of the *codi.jpg* file you downloaded earlier (#3). Click the *codi.jpg* file, click *"Open"*, and then click *"OK"*.

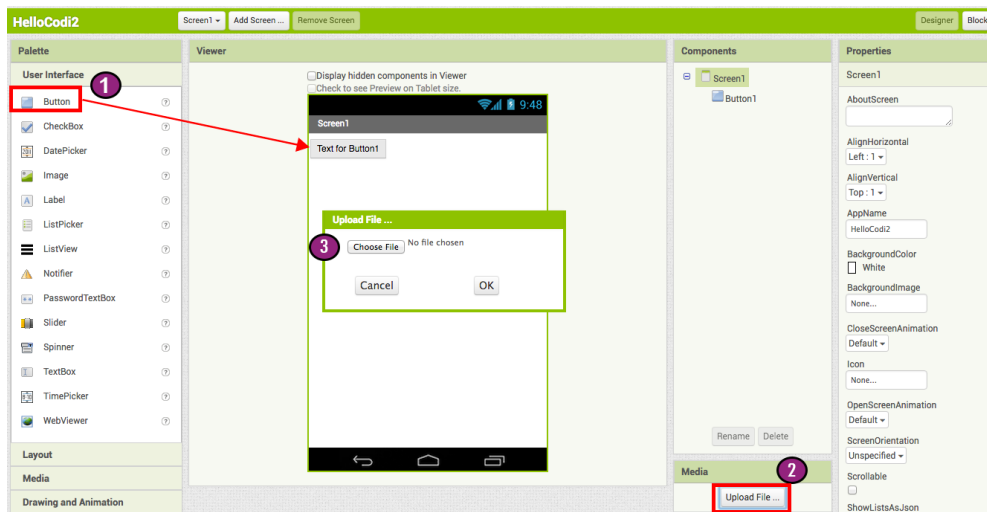
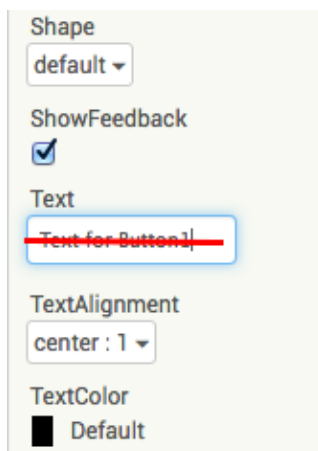


Figure 1 Screen # 1

**Step 2.** Change the Button's **Text** property:

Delete "Text for Button1", leaving the Button's text property blank so that there is no writing over the bee image.

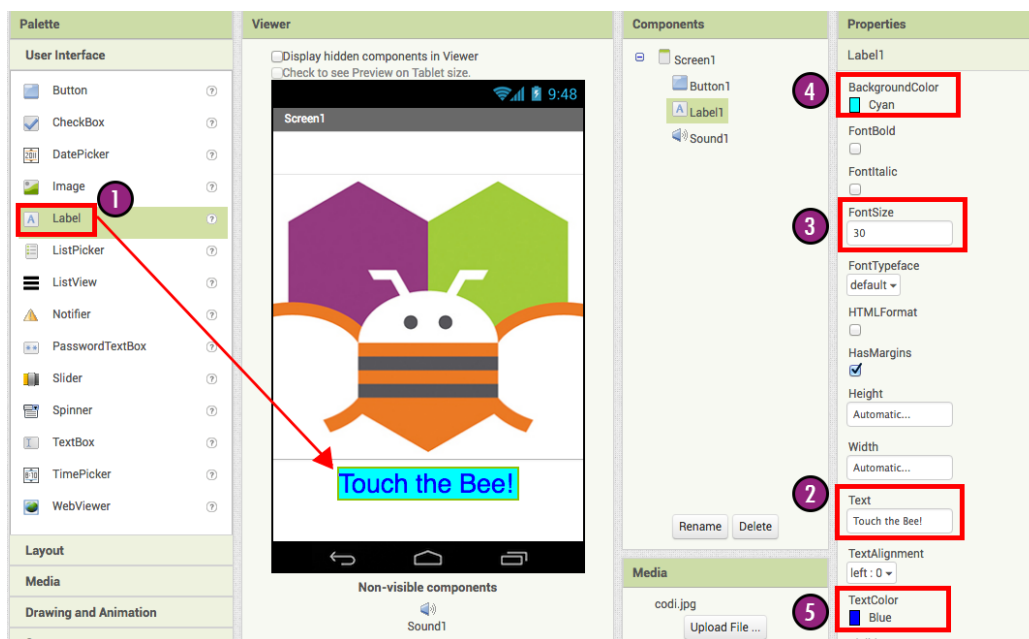


**Step 3.** From the **User Interface** palette, drag and drop the **Label** component to the Viewer (**#1**), placing it below the picture of the bee. It will appear under your list of components as **Label1**.

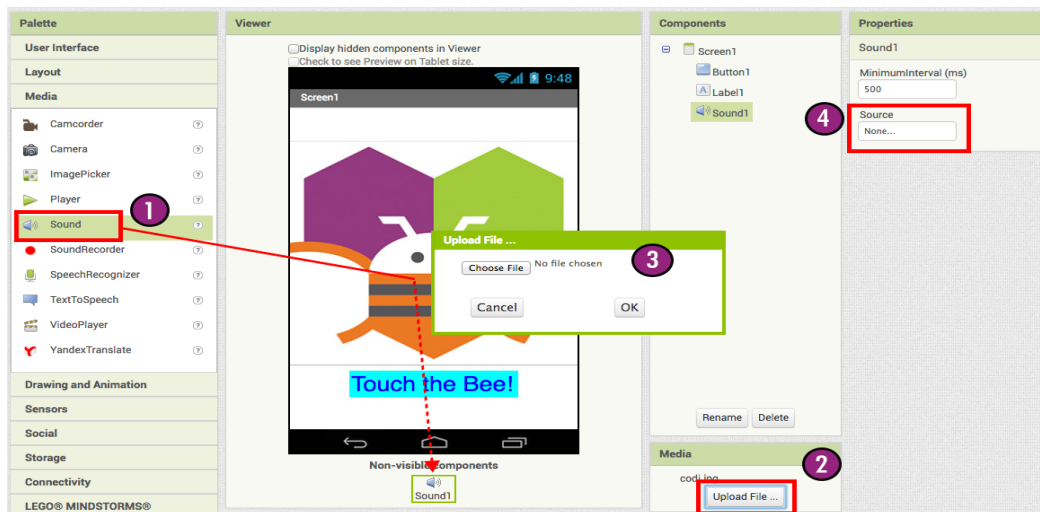
Under the **Properties** pane, change the

- (2) **Text** property of Label1 to read "Touch the Bee". You'll see the text change in the Designer and on your device.
- (3) **FontSize** to 30.
- (4) **BackgroundColor** of Label1 by clicking on the box. You can change it to any color you like.
- (5) **TextColor** to any color you like. (Note: if BackgroundColor and TextColor are the same, you will not be able to read your text!)

Here, the background color is set to aqua and the text color is set blue.



**Step 4.** Under Palette, click on the **Media** drawer and drag out a **Sound** component and place it in the Viewer (**#1**). Wherever you drop it, it will appear in the area at the bottom of the Viewer marked **Non-visible components**. Under the Media pane, Click Upload File... (**#2**) Browse to the location of the *Bee-Sound.mp3* file that you downloaded earlier and upload it to this project (**#3**). Under the Properties pane, see that the Source property currently says None.... Click the word None... to change the Sound1 component's Source to *Bee-Sound.mp3* (**#4**).



## Programming with the Blocks Editor

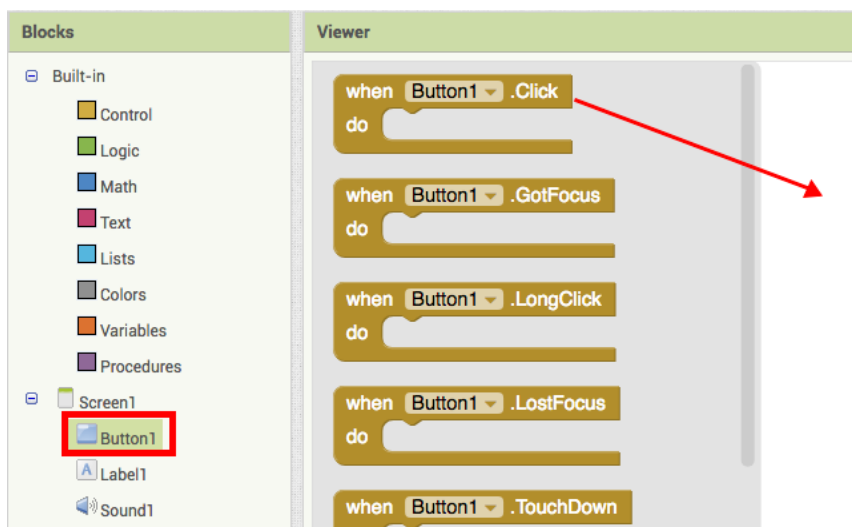
So far you have been arranging your app's screen and components in the *Designer*, which is in a web browser window. To start programming the behavior of the app, you need to go to the *Blocks Editor*. Click the Blocks button in the upper right of your screen to go to the Blocks Editor.



Once you have the Blocks Editor in front of you, continue to the next step to start programming your app with blocks.

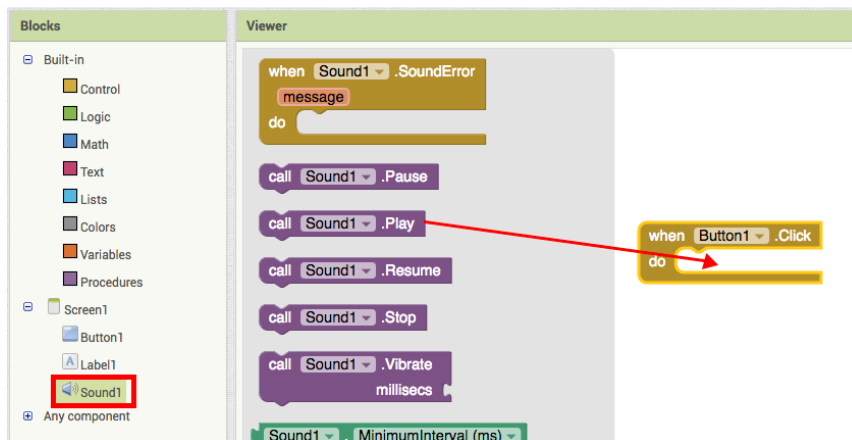
## Playing the Sound

**Step 1.** On the left side of the Blocks Editor, click the **Button1** drawer to open it. Drag and drop the **when Button1.Click** block in the work area (the open area on the right).



Those mustard yellow blocks are called **event handler** blocks. The event handler blocks specify how the mobile device should respond to certain events: a button has been pressed, the phone is being shaken, the user is dragging her finger over a canvas, etc. `when Button1.Click` is an event handler.

**Step 2a.** Click the **Sound1** drawer and drag the `Sound1.Play` block and connect it to the "do" section of the `when Button1.Click` block. The blocks connect together like puzzle pieces and you can hear a clicking sound when they connect.



The purple blocks are called **command** blocks, which are placed in the body of event handlers. When an event handler is executed, it runs the sequence of commands in its body. A command is a block that specifies an action to be performed (e.g., playing sound) when the event (e.g., pressing Button1) is triggered.

Your blocks should look like this at this point:



Now you can see that the **command block** is in the **event handler**. This set of blocks means; "when Button1 is clicked, Sound1 will play." The event handler is like a category of action (e.g., a button is being clicked), and the command specifies the type of action and the details of the action (e.g., playing a sound).