

CHAPTER 2

Working with Media

starting out with >>> **APP INVENTOR**
FOR ANDROID



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Sounds

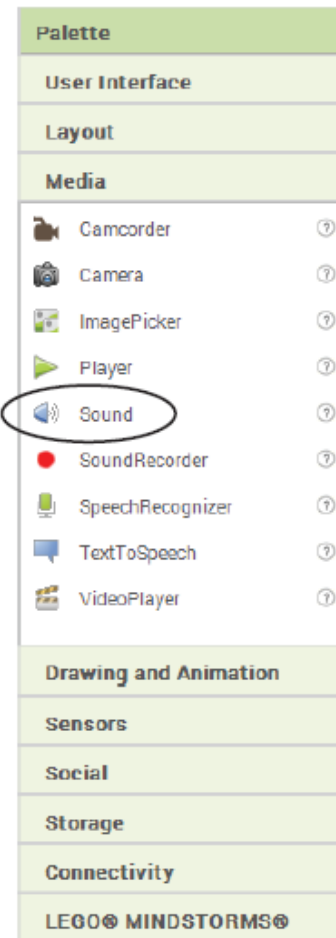
App inventor provides two components for playing sound files

1. The *Sound* component is recommended for small files such as those containing short sound effects.
2. The *Player* component is recommended for larger files such as those containing music.

Recommended sound formats are *.mp3* and *.wav*.

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Figure 2-49 The Sound Component is in the Media Palette (Source: MIT App Inventor 2)



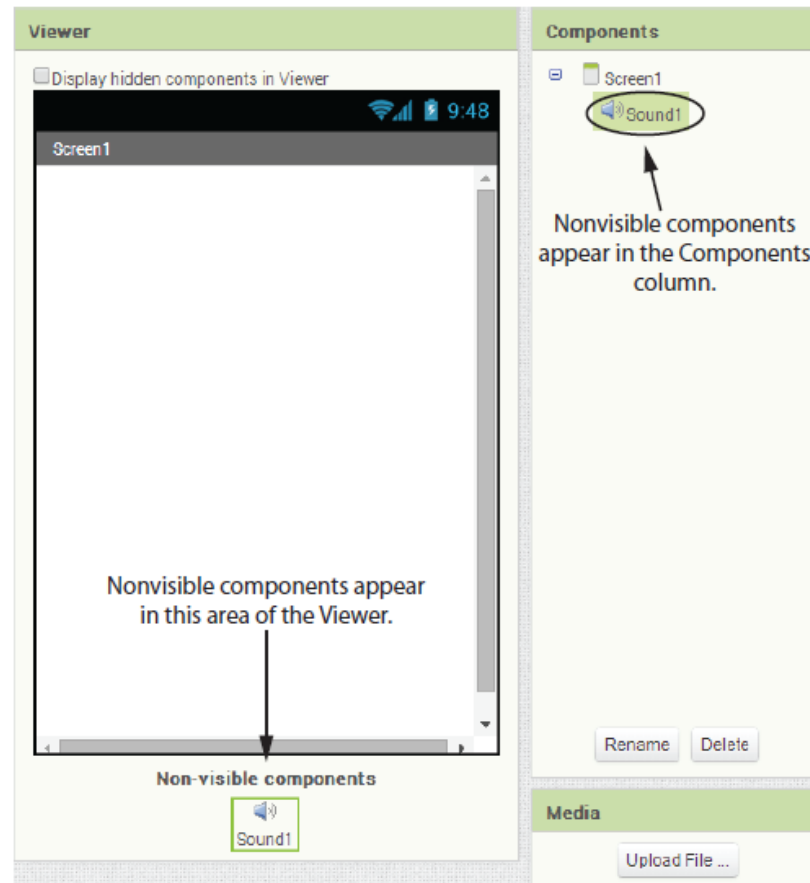
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The Sound Component

- In the Designer, the *Sound* component is found in the Media section of the Palette.
- Drag it from the Palette to the Viewer.
- The *Sound* component is a non-visible component.
- When you drop a *Sound* component it appears in the area below the screen (Figure 2-50).

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Figure 2-50 The Sound Component is a Nonvisible Component
(Source: MIT App Inventor 2)

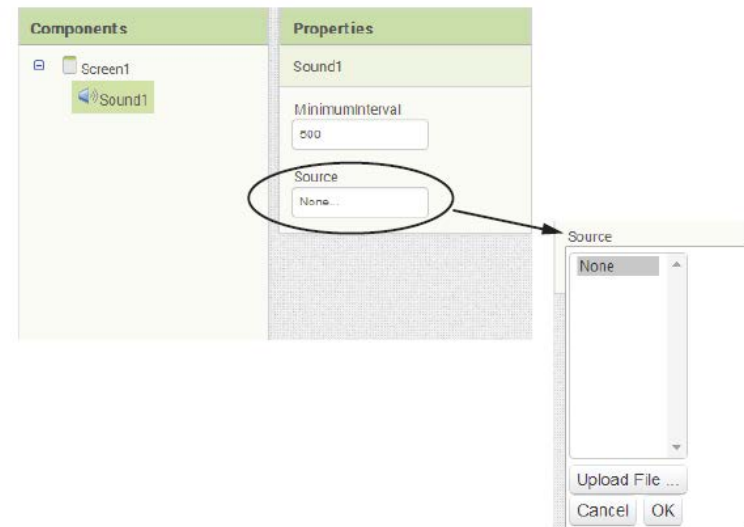


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The Sound Component

- Clicking the *Source* property in the Properties column causes a dialog box to appear.
- You can either select a previously uploaded file or you can click on the *Upload File...* button.

Figure 2-51 The Source Property (Source: MIT App Inventor 2)



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The Sound Component

Find the block for the *Play* method by clicking the name of the *Sound* component in the Blocks column.

Figure 2-52 The Sound Component's Play Method (Source: MIT App Inventor 2)



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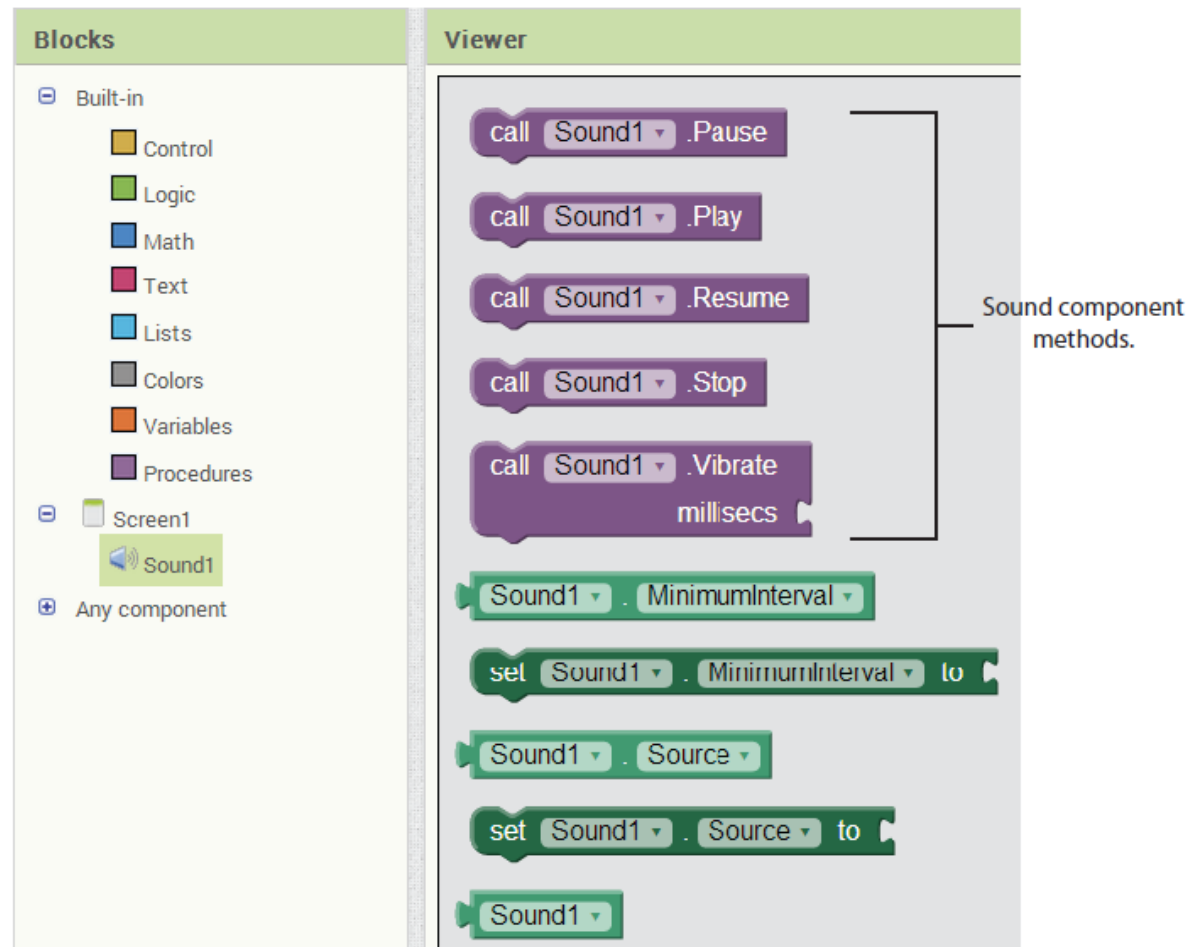
Pausing, Resuming, and Stopping the Sound

Other methods to control a sound bar:

- *Pause* – This method pauses an audio file.
- *Resume* – After you have use the *Pause* method to pause an audio file, you can use the *Resume* method to start playing again.
- *Stop* – This method stops the audio file that is currently playing.

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Figure 2-57 The Sound Component Methods (Source: MIT App Inventor 2)



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Vibrating the Phone

- You may also use the *Sound* component to vibrate the phone.
- The emulator does not vibrate.
- To vibrate the phone, call the *Sound* components *Vibrate* method.
- The *Vibrate* method will cause the phone to vibrate for a specified number of milliseconds.
- 1000 ms equals one second.

Figure 2-58 The Sound Component's *Vibrate* Method (Source: MIT App Inventor 2)



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Vibrating the Phone

- Use the number block anytime you need to specify a number in a program.
- The number block is found under the *Built-In*, In the *Math* drawer.

Figure 2-59 The Number Block (Source: MIT App Inventor 2)



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The *Player* Component

- To play a long audio file, such as an entire song, it is recommended that you use the *Player* component.
- Here is a summary of its properties:
- **Source** – Designates an audio file.
- **Volume** – Set a value from zero through 100.
- **Loop** – Can cause the audio file to loop, or play repeatedly.

Sounds

The Player components methods:

- *Start* – Starts the audio file playing.
- *Pause* – Pause an audio file that is currently playing.
- *Stop* – Stop an audio file that is currently playing.
- *Vibrate* – Vibrates the phone a specified number of milliseconds.

Color Blocks

Use Color blocks to represent and work with colors.

- Many of the user interface components in App Inventor have properties that determine the components color.
- For example:
 - *Screen*, *Button* and *Label* components all have a *BackgroundColor* property that determines the component's background color.

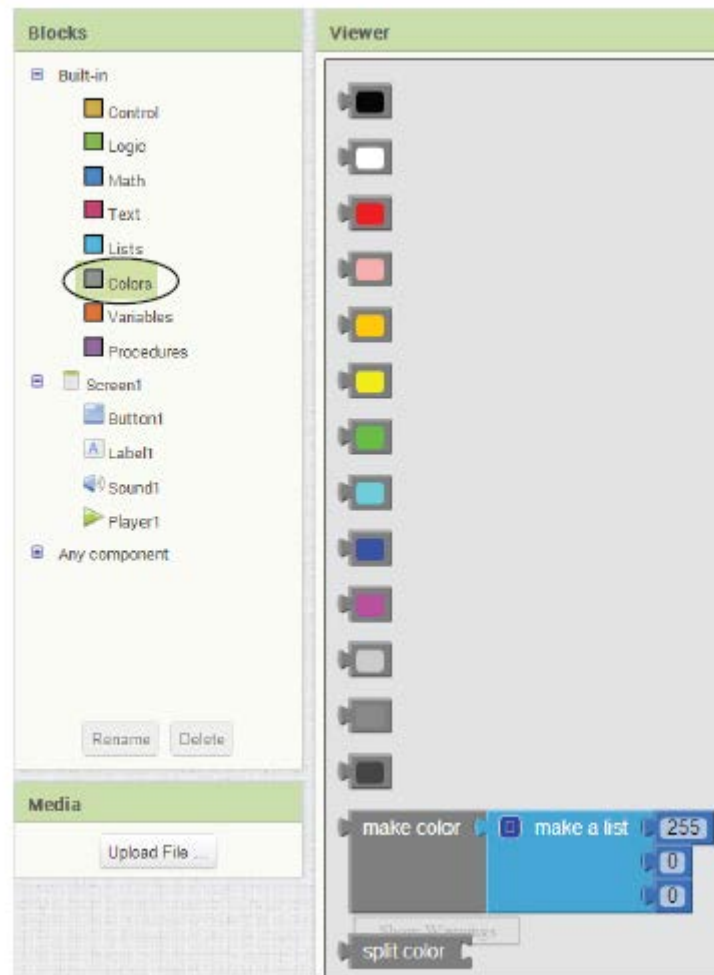
Color Blocks

Use Color blocks to represent and work with colors.

- *Button* and *Label* components also have a *TextColor* property that determines the color of the component's text.
- There are a selection of *Color* blocks in the Blocks Editor to set the value of the color property.

Color Blocks

Figure 2-63 The Color Blocks (Source: MIT App Inventor 2)



Color Blocks

Figure 2-64 shows the blocks for programmatically setting *Screen1*'s *BackgroundColor* property to *Orange*.

Figure 2-64 Setting *Screen1*'s *BackgroundColor* Property to Orange

(Source: MIT App Inventor 2)

