

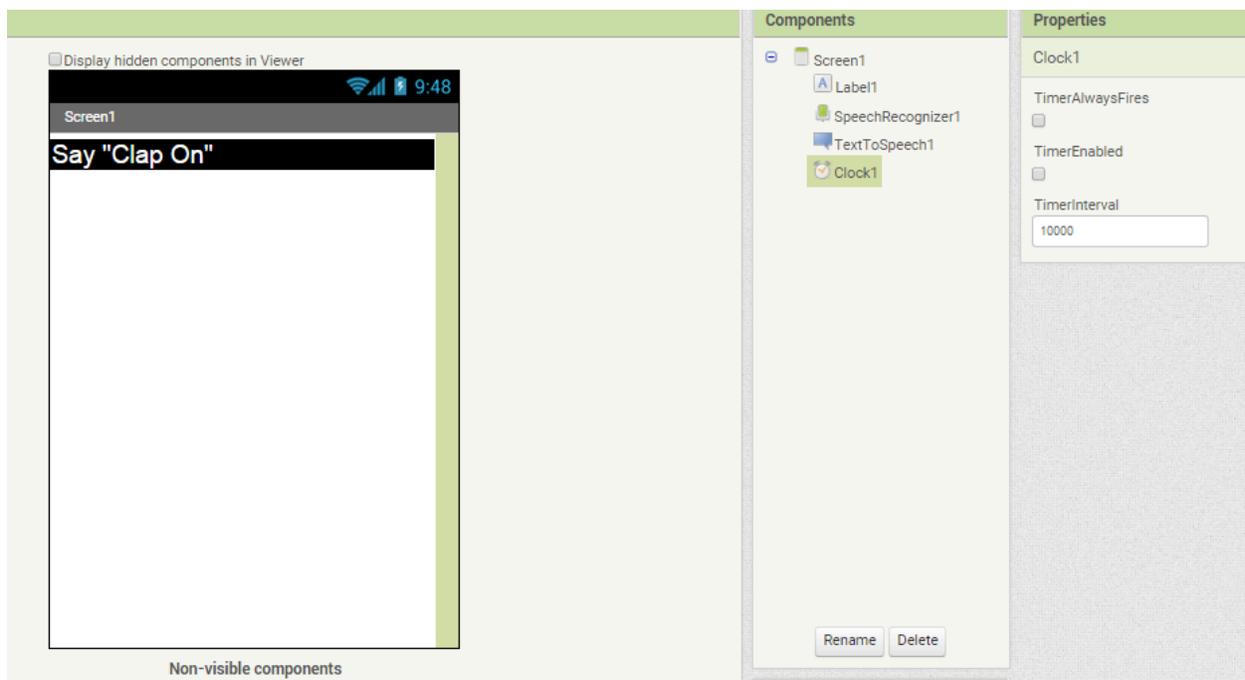
Clapper

Purpose

This is a small exercise on the Speech input and output facilities of App Inventor 2. It is based on a commercial product known as The Clapper, but it responds to spoken “Clap On” and “Clap Off” requests to light up the screen.

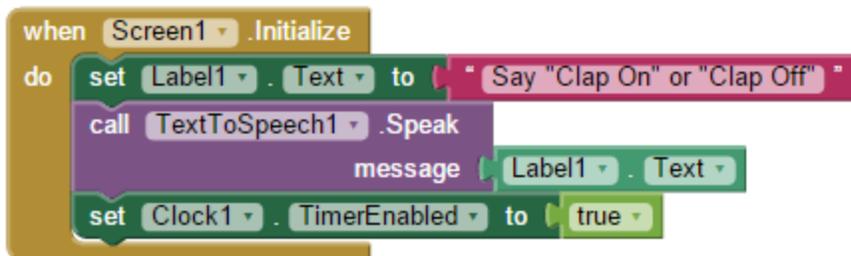


Designer

The image shows the App Inventor 2 Designer interface. On the left is a preview window showing a mobile screen with a black header containing the text "Say 'Clap On'". The main workspace is empty. On the right, the "Components" panel lists "Screen1", "Label1", "SpeechRecognizer1", "TextToSpeech1", and "Clock1". The "Properties" panel for "Clock1" shows "TimerAlwaysFires" (unchecked), "TimerEnabled" (unchecked), and "TimerInterval" set to "10000".

The screen has a Label for prompts. Other components include the Speech Recognizer and Text to Speech components, along with a Clock component set to 10 second disabled single shot operation.

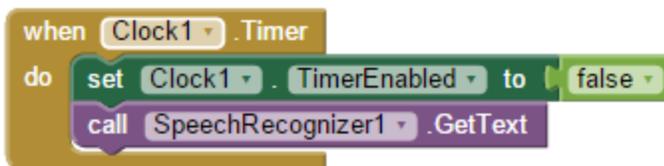
Screen1.Initialize



```
when Screen1.Initialize
do
  set Label1.Text to "Say 'Clap On' or 'Clap Off' "
  call TextToSpeech1.Speak
  message Label1.Text
  set Clock1.TimerEnabled to true
```

The code block is a Scratch script for the Screen1.Initialize event. It contains four actions: setting the text of Label1 to "Say 'Clap On' or 'Clap Off' ", calling the Speak method of TextToSpeech1, sending a message to Label1.Text, and setting the TimerEnabled property of Clock1 to true.

Clock1.Timer

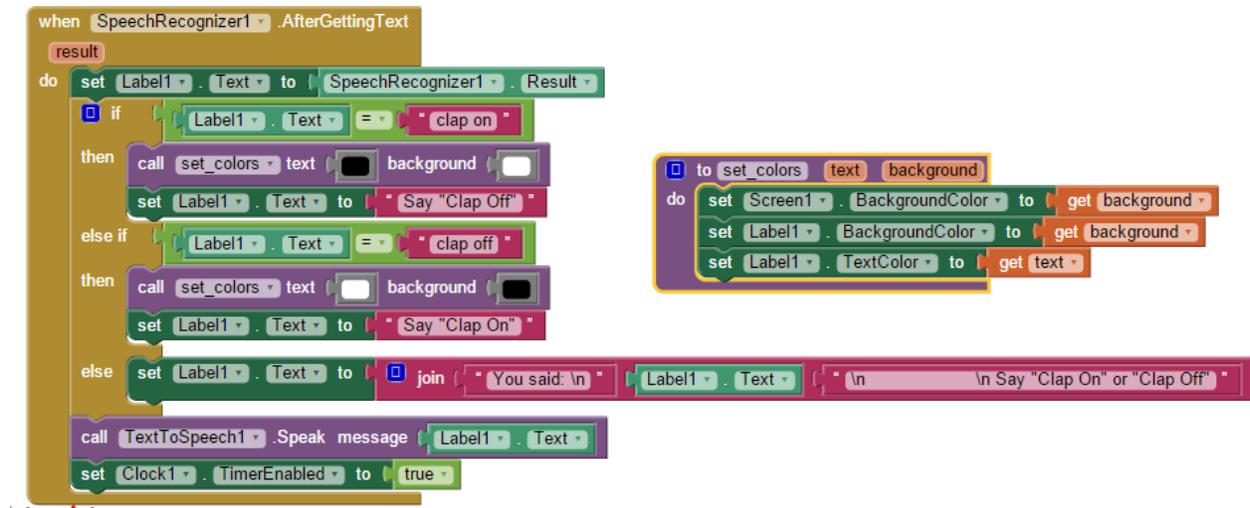


```
when Clock1.Timer
do
  set Clock1.TimerEnabled to false
  call SpeechRecognizer1.GetText
```

The code block is a Scratch script for the Clock1.Timer event. It contains two actions: setting the TimerEnabled property of Clock1 to false, and calling the GetText method of SpeechRecognizer1.

The ten second single shot timer is there to slow down response to requests, to provide at least 10 seconds of light after turning on the light.

When SpeechRecognizer1.AfterReceiving Text



Show what we heard in Label1. The screen background and Label1 background color are set to white or black after the users says "clap on" or "clap off" respectively. If neither was said, tell the user what we heard and prompt him again.

Gallery Project

ai2.appinventor.mit.edu/?galleryId=6069097627123712

Other projects

https://docs.google.com/document/d/1acg2M5KdunKjgM3Rxy_Rf6vT6OozxdIWglgbmzroA/edit?usp=sharing