

Voice controlled Smart Home Automation- Documentation

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Important links:

<https://thingspeak.com/channels/1502685>

<http://ai2.appinventor.mit.edu/#6385348208099328>

Get access to apk link (.aab and .apk) :

https://github.com/harsh-thummar-146/Smart_Home_Automation_project

Objective:

Create an app which recognizes human voice and follow the instructions given by individuals

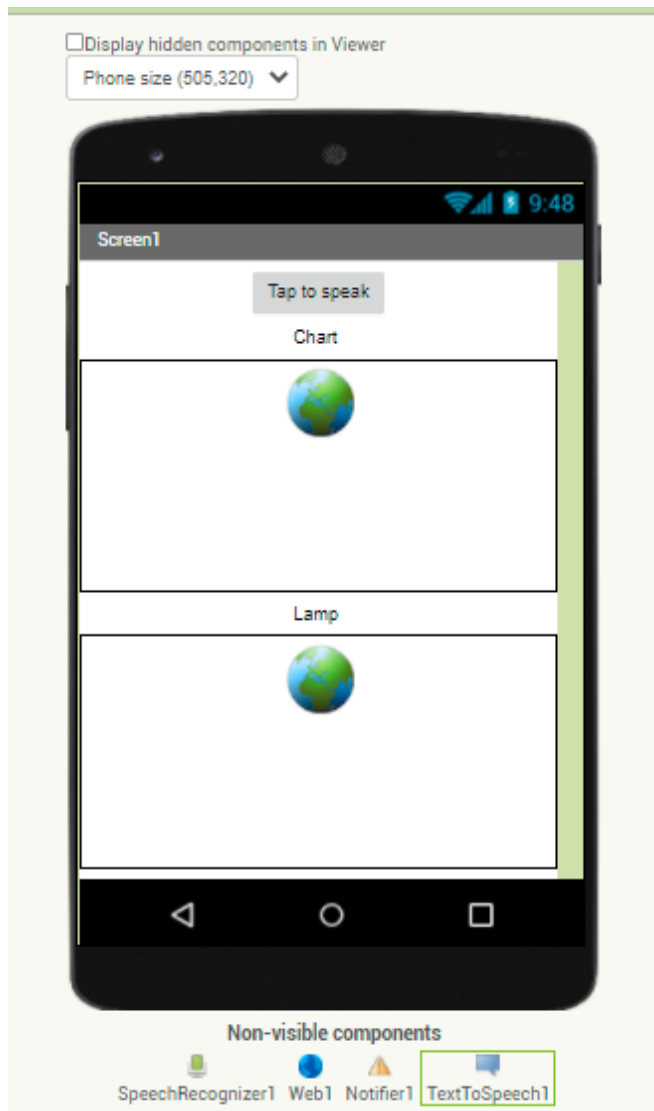
For eg. Saying like Lights ON or Lights OFF etc

Read me:

(.aia) file is for import this app directly in the MIT app background for verification.

(.apk) and be directly accessible through android

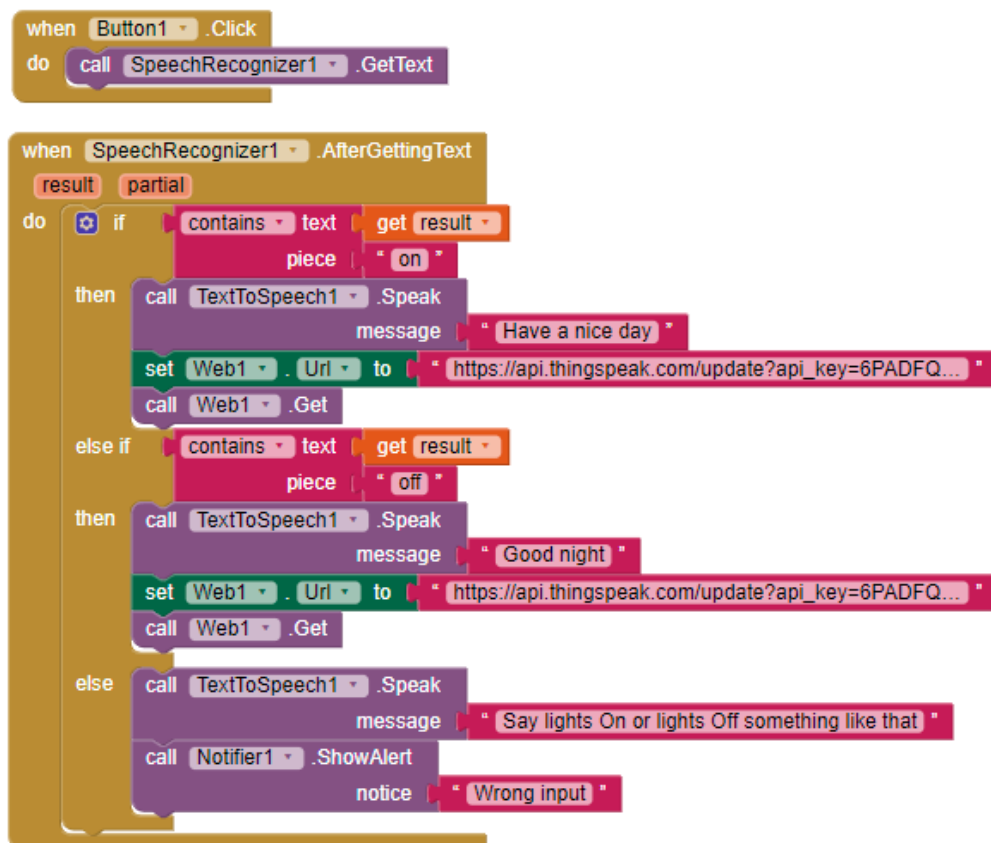
**Internal Designer Screen with required components In
MIT App inventor**



Components which used for designing:

- Tap to speak button
- chart label
- web viewer link for given chart (connected to ThingSpeak)
- Lamp label
- web viewer for widget of Lamp(connected to ThingSpeak)

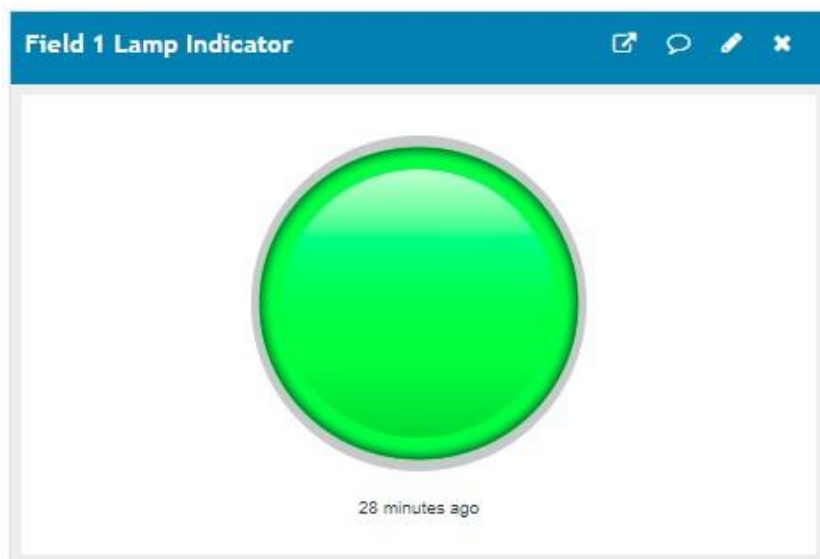
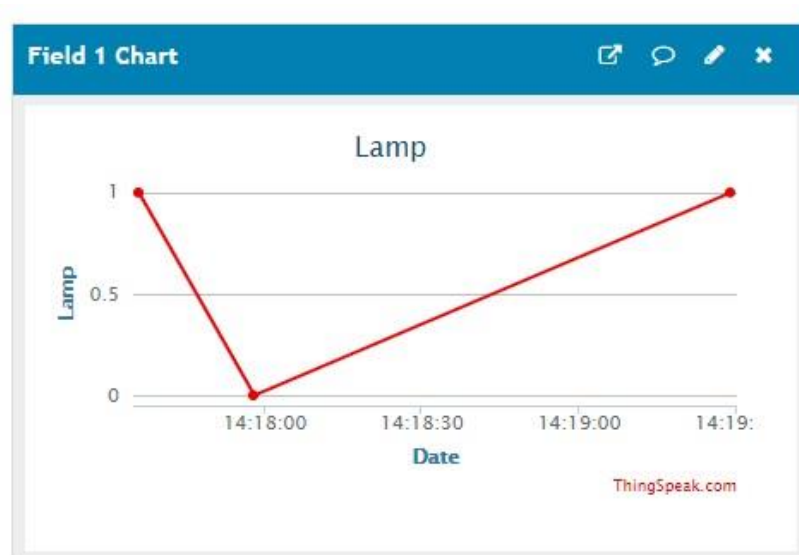
Developer Block Programming at the back end :



Tasks Performed:

- Speech recognizer will recognize the instruction and converted it to Text
- Then comes to analysing part where it compared with different cases like Light on or Light off
- here the function of TextToSpeech is to provide communication to the person via block coding
- And output will be reflected in the ThingSpeak as diagram shown below as the given instructions

ThingSpeak Output:



-as shown Lights on the visualization of widget is shown above and it turned on

Conclusion :

To encapsulate, we have gone through visualization of smart voice controlled home automation in ThingSpeak. However, in real life projects also this development can be extended to send communication signals to the NodeMcu along with Arduino UNO in breadboard and get actual output as per the Instructions.