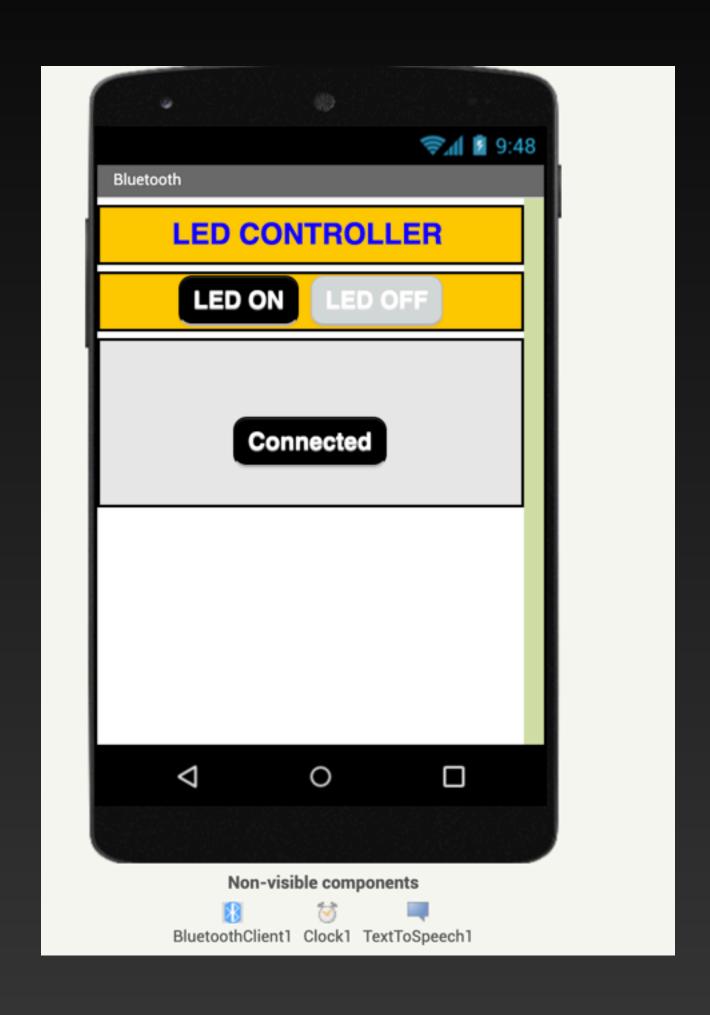
# oT with MIT App Inventor

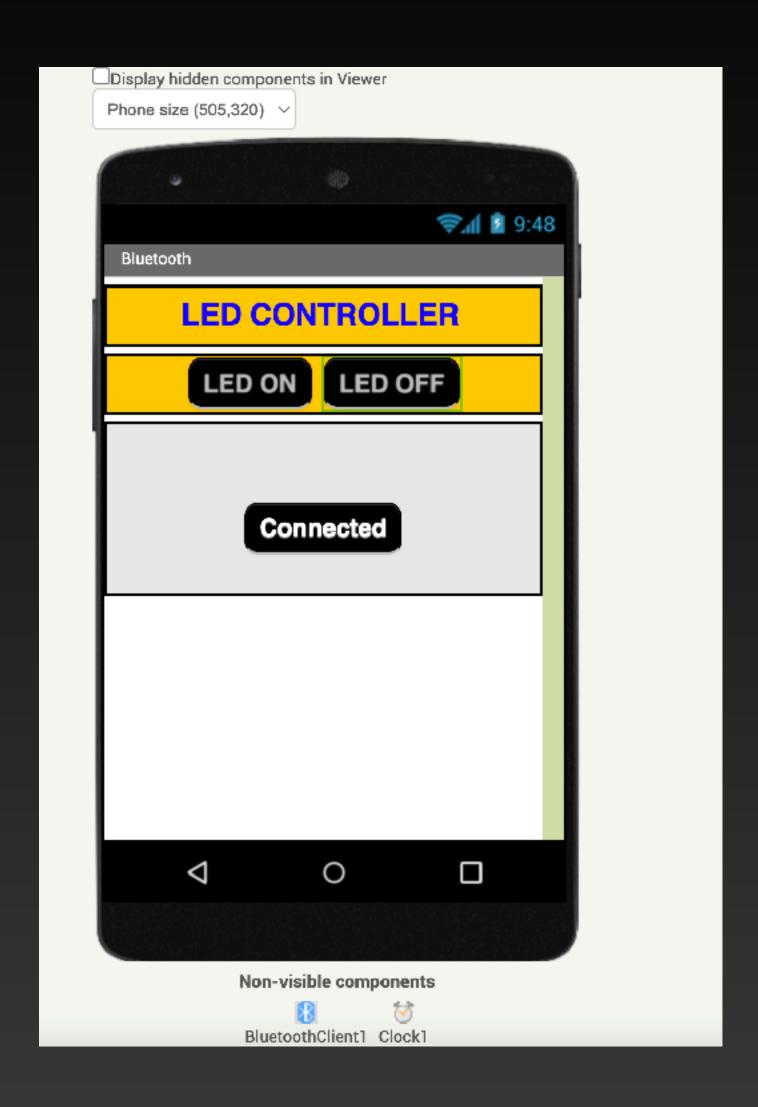
Fundamental

# LED control through bluetooth with sound output



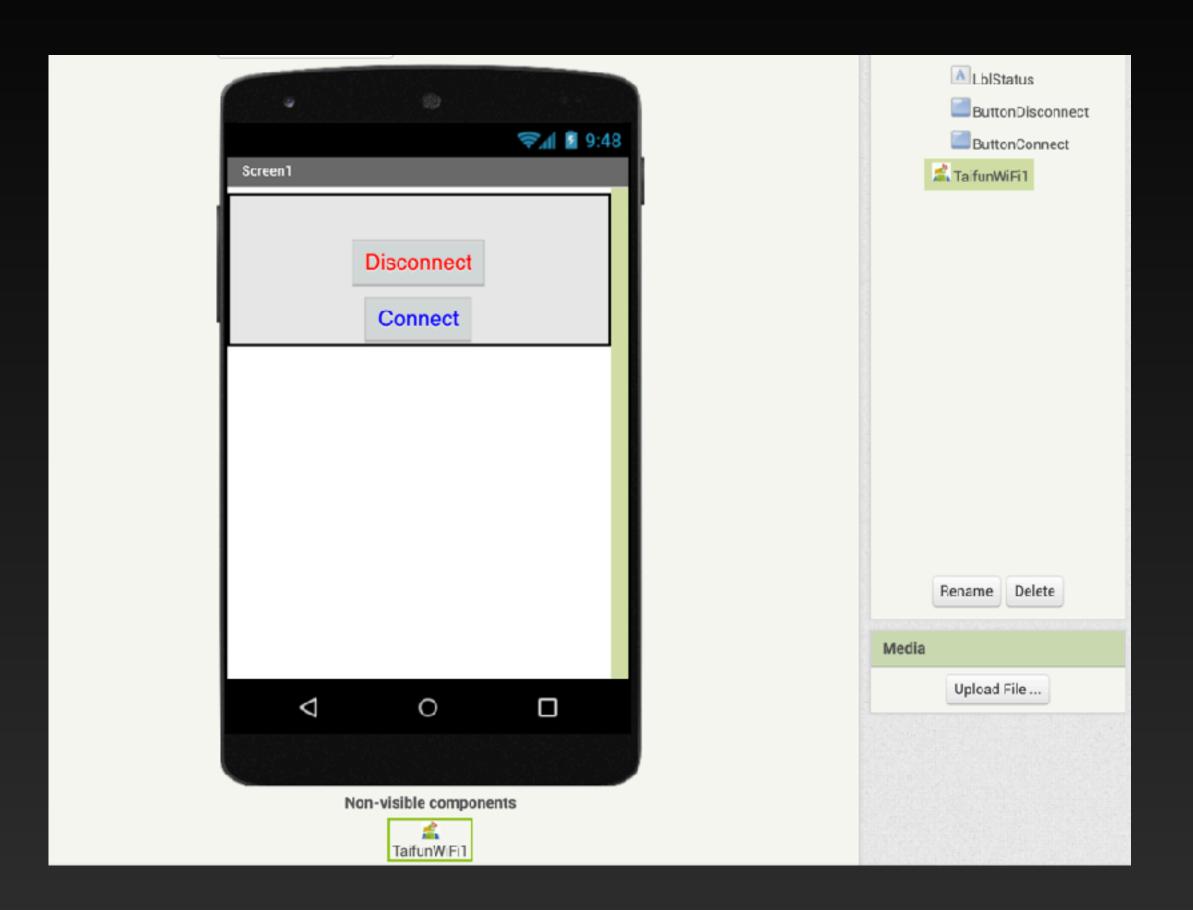
```
set ListPicker1 - . Elements - to BluetoothClient1 - . AddressesAndNames -
   cal TextToSpeech1 - .Speak
                    mecsage | Select Raspberry Pi Bluetooth and address |
  en ListPicker1 - AtterPicking
   if call BluetoethClient1 - .Connect
                                  address | ListPicker1 - . Selection -
    tren set ListPickert . Selection to BluetoothClientt . AddressesAndNames
when Clock1 - .Timer
 lo 😥 ii 📑 BluetoothClient1 → . IsConnected →
    than set LabelStatus . Text to Connected
         set (LabelStatus 🕶 . TextColor 🕶 to 🍿
    else set LabelStatus . Text to be Disconnected
         set LabelStatus . TextColor to
   BluetoothClient1 ▼ . IsConnected ▼
    then set (ButtonOn 🕶 . TextColor 🕶 to 📢
         set (ButtonOff - . TaxtColor - to (
         call ElueloothClient1 . Send1ByteNumber
         call TextToSpeech1 v .Speak
                           message ( LED turned ON )
    if BluetoothClient1 - IsConnected -
    then set ButtonOff . TextColor to
         sel ButtonOn ▼ . TextColor ▼ to (
         cal BluetoothClient1 - Send1ByteNumber
                                      Color for button text.
         cal TextToSpeech1 - Speak
                        message [ * [LED turned OFF] *
```

## LED control through bluetooth



```
when ListPicker1 .BeforePicking
  set ListPicker1 - . Elements - to | BluetoothClient1 - . AddressesAndNames -
when ListPicker1 ▼ .AfterPicking
address (ListPicker1 - Selection -
    then set ListPicker1 ▼ . Selection ▼ to BluetoothClient1 ▼ . AddressesAndNames ▼
when Clock1 - .Timer
do 📋 if 📗 BluetoothClient1 🔻 . IsConnected 🕶
    then set LabelStatus . Text to Connected
          set LabelStatus - . TextColor - to
    else set LabelStatus . Text to . Disconnected ...
          set LabelStatus . TextColor to
 when ButtonOn . Click
            BluetoothClient1 ▼ . IsConnected ▼
    then set ButtonOn ▼ . TextColor ▼ to
          set ButtonOff . TextColor to
          call EluctoothClient1 - Send1ByteNumber
                                      number (49)
 when ButtonOff .Click
            BluetoothClient1 - IsConnected -
    then set ButtonOff . TextColor to
          set ButtonOn . TextColor to
          call BluetoothClient1 ▼ .Send1ByteNumber
                                             Send a 1-byte number to the conne
```

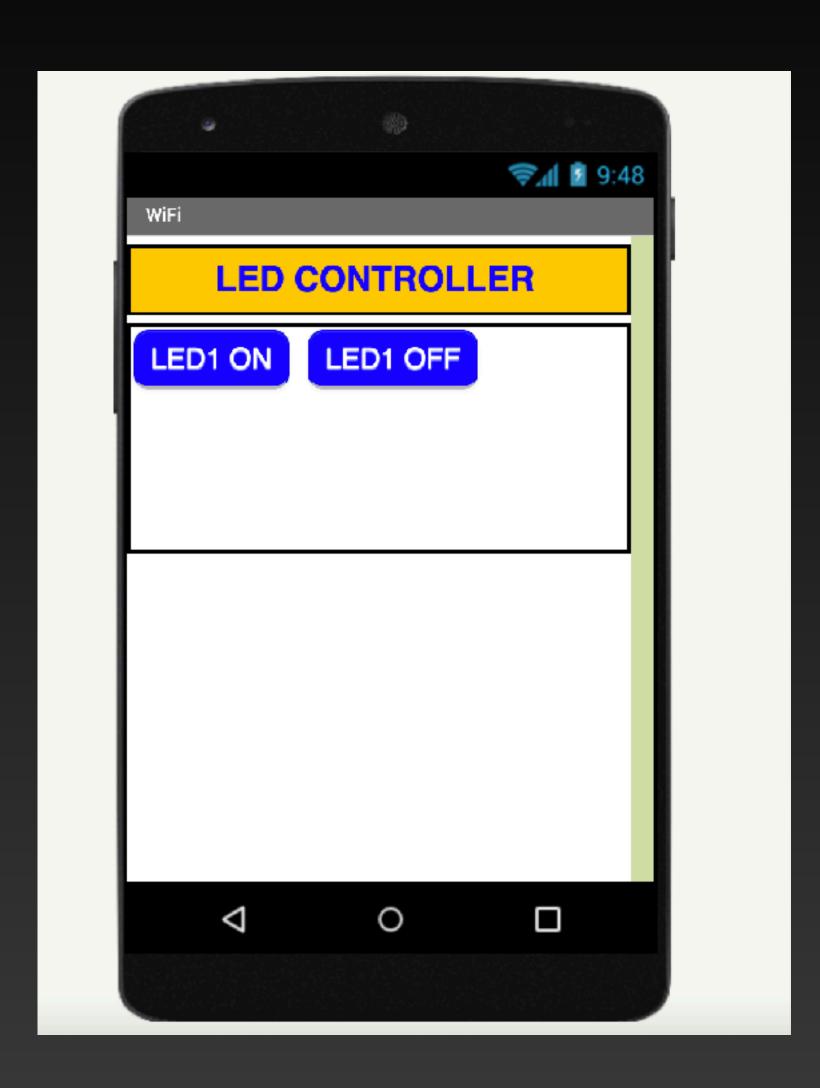
#### Getting and Displaying Local WiFi Parameters



```
when ButtonConnect . Click
do call TaifunWiFi1 .ConnectSSID
                                  get global ssid -
                                  get global password
    set LblStatus ▼ . Text ▼ to
                                       " LocalIP:
                                       call TaifunWiFi1 ▼ .LocalIP
                                        " \n "
                                        " MAC Address:
                                       call TaifunWiFi1 .MacAddress
                                        " \n "
                                        " Signal Strength:
                                       call TaifunWiFi1 ▼ .SignalStrength
    set LblStatus ▼ . TextColor ▼ to
when ButtonDisconnect ▼ .Click
    call TaifunWiFi1 .Disconnect
    " Disconnected "
```

https://puravidaapps.com/wifi.php

### Control LED through Wifi



```
to ALLOFF
                                                              do set LED1ON ▼ . TextColor ▼ to
                                                                  set LED10FF ▼ . TextColor ▼ to
initialize global RaspberryPi to http://192.168.1.207
when LED1ON ▼ .Click
do set Web1 . Url to poin
                                     get global RaspberryPi -
                                                             when LED10FF .Click
                                                                                                 get global RaspberryPi
                                     " /LED/on "
                                                             do set Web1 ▼ . Url ▼ to ( in join
    call Web1 ▼ .Get
    set LED1ON ▼ . TextColor ▼ to
                                                                  call Web1 ▼ .Get
    set LED10FF ▼ . TextColor ▼ to
                                                                  set LED1OFF ▼ . TextColor ▼ to
                                                                  set LED1ON ▼ . TextColor ▼ to
```

#### Control LED through Wifi

- \$ sudo apt-get install python-flask
- \$ sudo python3 LEDAppControl\_WiFi.py