README_PI_DEVICE

Working of Raspberry Pi Device

The devices are installed at different blood banks. After receiving a request, it then proceeds to voice loud and clear messages describing the patients' details. The details are received via mail from the BloodPool website and it's sent to Google's API for talkback. The mail is accessed remotely using IMAP Server and RFC822.

It can be used to revert back, and has 3 buttons with easy instructions of what they do.

1. will send an affirmative mail back to the requester.

2. will send a negative message to our server.

3. will indicate the device to sleep for half an hour and begin the talk back again after that.

All these mails are sent using SMTP.

Specs and Tech Used

SoC: Broadcom BCM2837
CPU: 4× ARM Cortex-A53, 1.2GHz
GPU: Broadcom VideoCore IV
RAM: 1GB LPDDR2 (900 MHz)
Networking: 10/100 Ethernet, 2.4GHz 802.11n wireless
Bluetooth: Bluetooth 4.1 Classic, Bluetooth Low Energy
Storage: microSD
GPIO: 40-pin header, populated
Ports: HDMI, 3.5mm analogue audio-video jack, 4× USB 2.0, Ethernet, Camera Serial Interface (CSI), Display Serial Interface (DSI)

IF This Then That, also known as **IFTTT** is a free web-based service to create chains of simple conditional statements, called applets. An applet is triggered by changes that occur within other web services such as Gmail, Facebook, Instagram, or Pinterest. Whenever a mail from the 'bloodpool' ID is encountered, an event is published via Particle cloud. Particle Web IDE is a free web based IoT cloud used to carry out tasks remotely on claimed devices.

The **Particle Cloud** gives a dynamic log, helping in remote monitoring of whether the device was active and did it actually run the code or not.

Circuitry of Pi Device