**SMART HOME ASSISTANT WITH CLOUD INTEGRATION**

**OBJECTIVE :**

The main objective of this project is to reduce work load for the people and save energy.

**HARDWARE AND SOFTWARE REQUIRED**

**Module 1(HARDWARE):**

1. Raspberrypi
2. Basic sheild
3. Usb microphone

**Module 2(SOFTWARE) :**

1. ALEXA
2. PYTHON
3. RASPBIAN
4. IFTTT(ONLINE)
5. PUBNUB(ONLINE)

**Proposed system :**

* Login into your amazon account.
* Create a new amazon alexa product and make of note of the product credentials.
* Connect raspberrypi and download the json file of your amazon product and keep it in the home.
* Follow the steps as mentioned in the following link to install Alexa in raspberrypi.
* <https://developer.amazon.com/docs/alexa-voice-service/set-up-raspberry-pi.html>
* After installing alexa in your raspberrypi connect USB microphone to your raspberrypi and go to menu >> preferences >> audio >> select the option with usb microphone.
* Now connect a 3.3mm jack speaker and test the alexa by saying “ALEXA……”.
* Login to <https://admin.pubnub.com/#/login> (PUBNUB) and save the publish and subscribe keys for further use.
* Follow the steps by logging into your IFTTT .
* <https://circuitdigest.com/microcontroller-projects/voice-controlled-home-automation-using-amazon-alexa-and-raspberry-pi>
* Run the python code in python2 as python3 doesnot support many features.
* Open python2 by typing the command “idle python2” in the terminal.
* Finally make your home smart by using Alexa!!!!

**4**

**3**

LIGHT/FAN – ON/OFF

IFTTT

Raspberrypi

Raspberrypi

Human voice

**1**

**2**