**HOME AUTOMATION USING GOOGLE ASSISTANT**

In this project we are going to control our devices with voice commands using Google assistant.

1. **Installing required libraries**

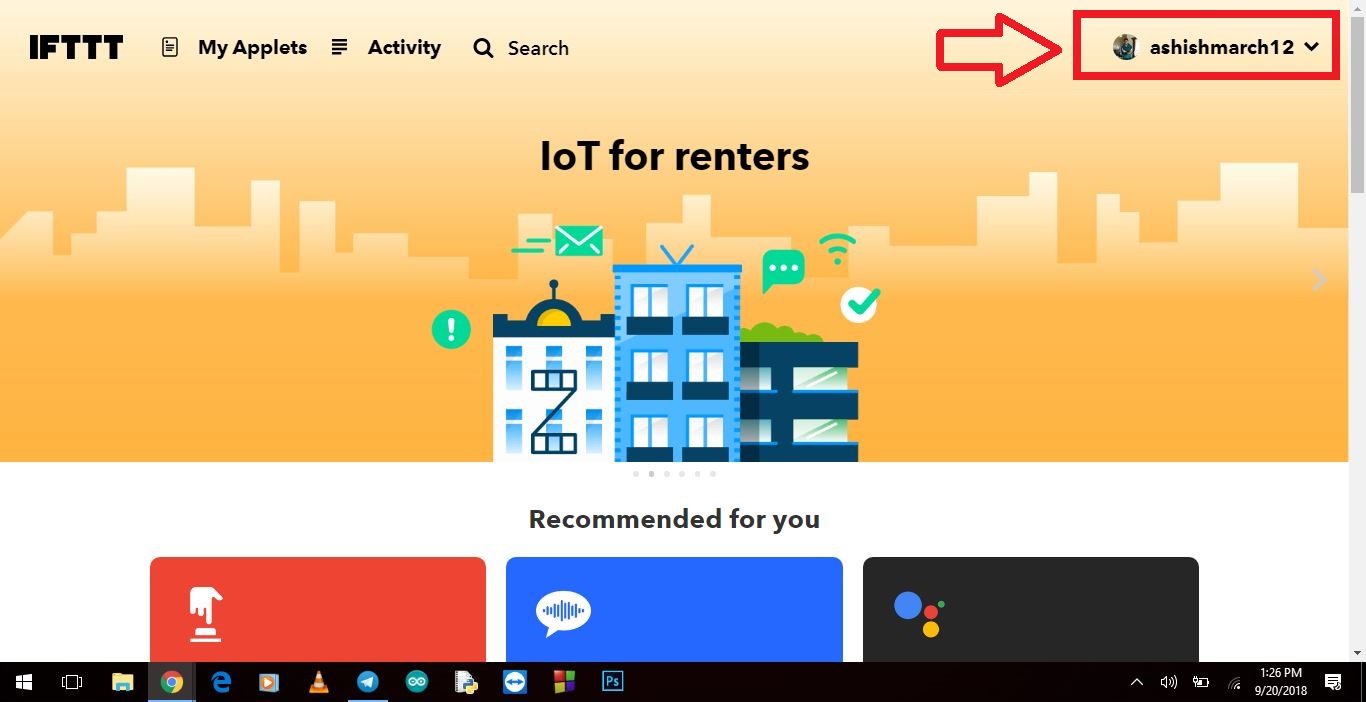
Install these libraries by typing the commands in terminal

*pip install requests*

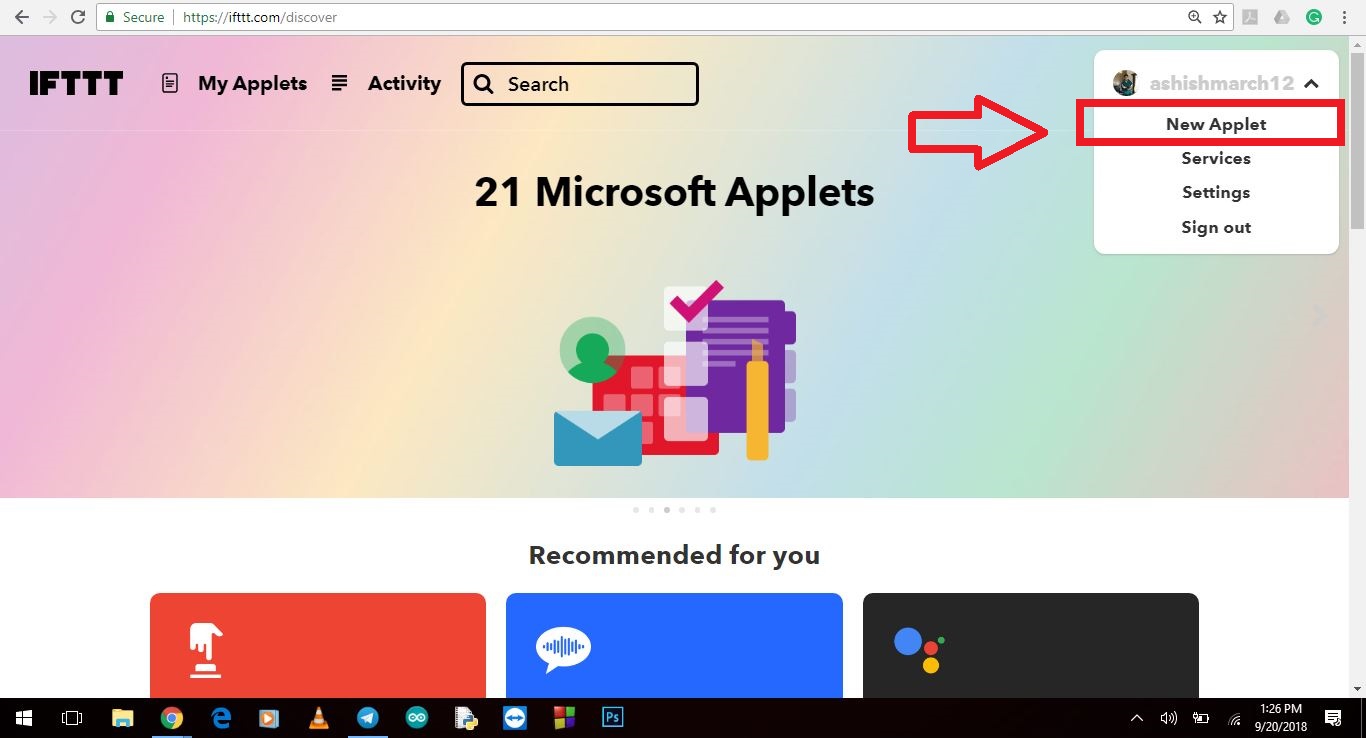
*sudo apt-get install build-essential python-dev*

1. **Setting up Google Assistant and linking it to ThingSpeak Channel**

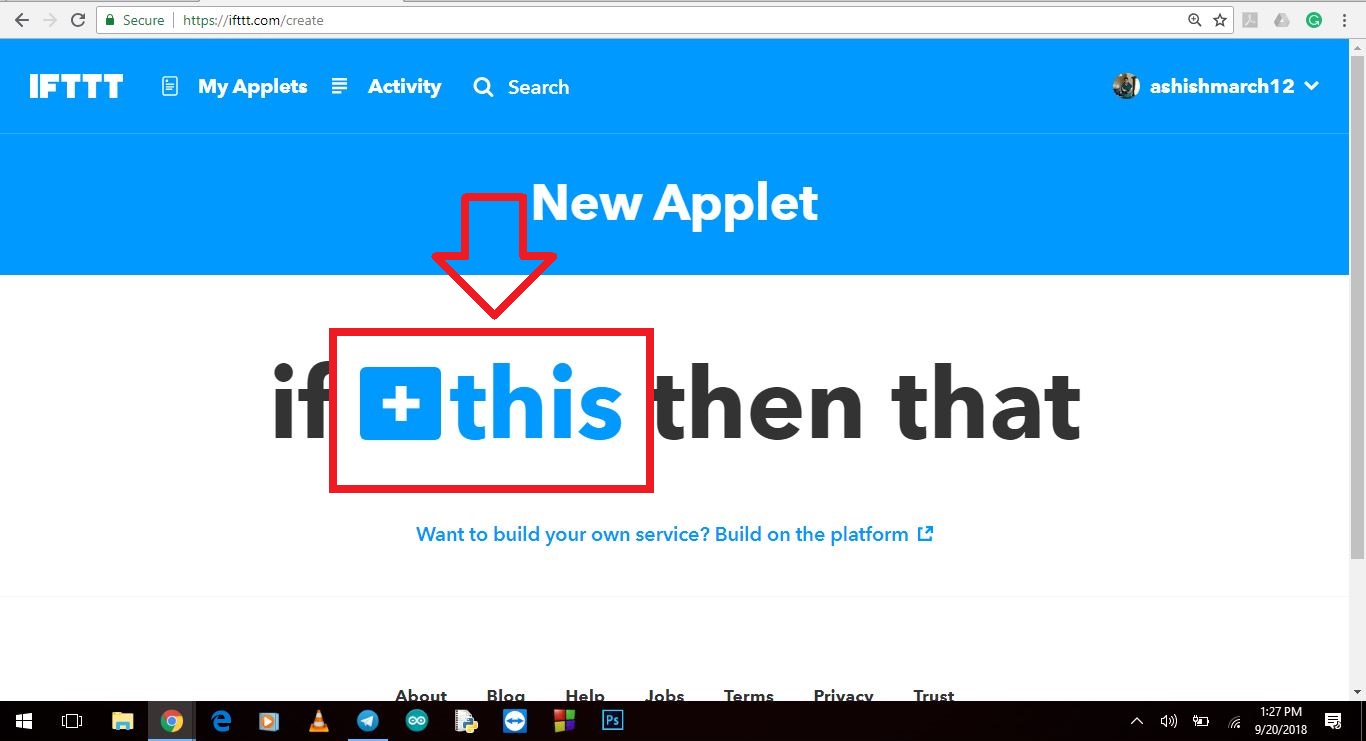
**Step 1:** Create account on IFTTT website and click on your ID.

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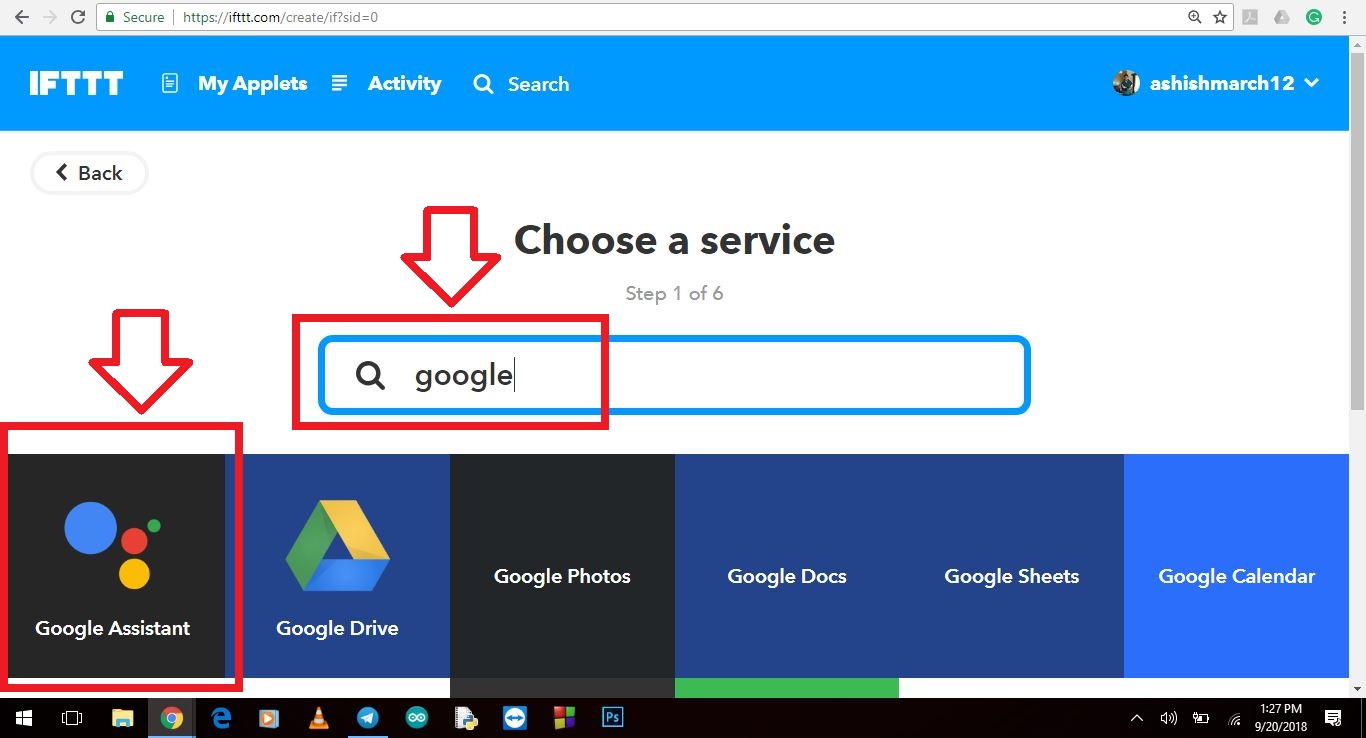
**Step 2:** Now click on “New Applet”

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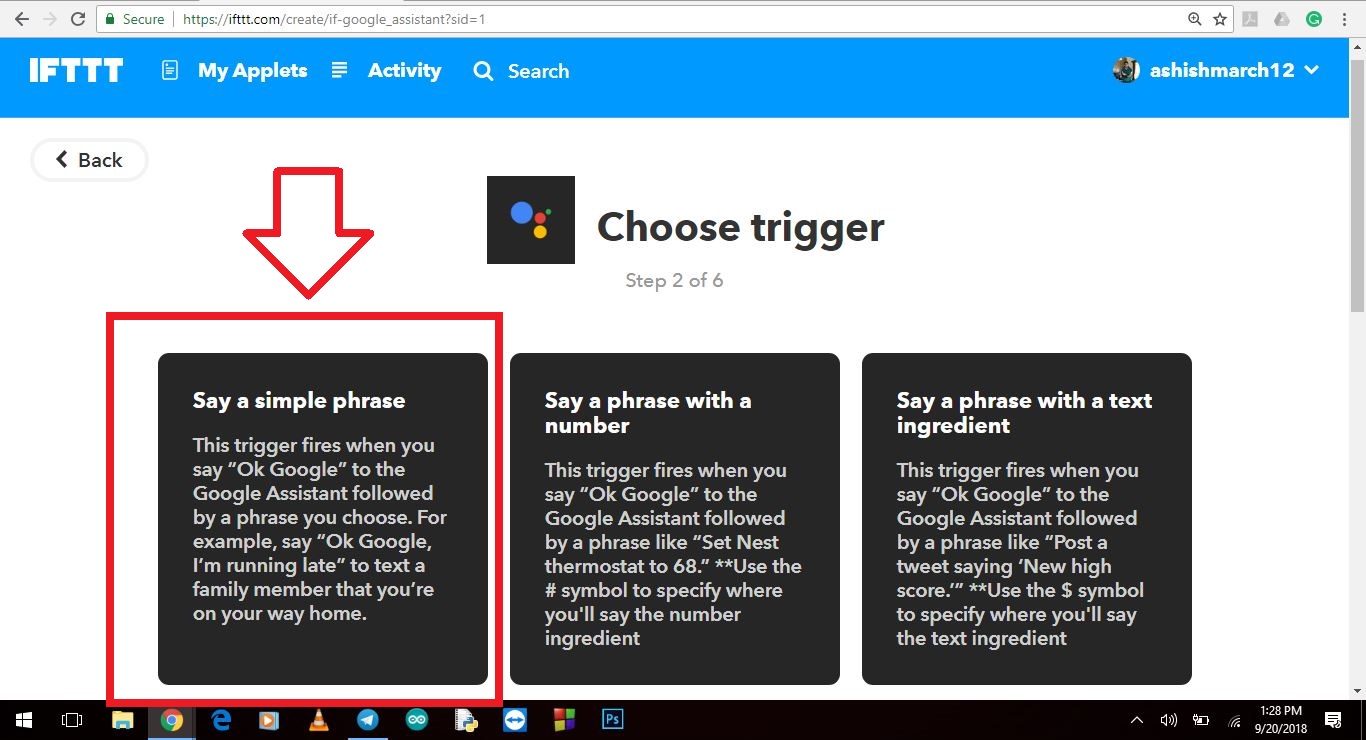
**Step 3:**  Click on “+this”.



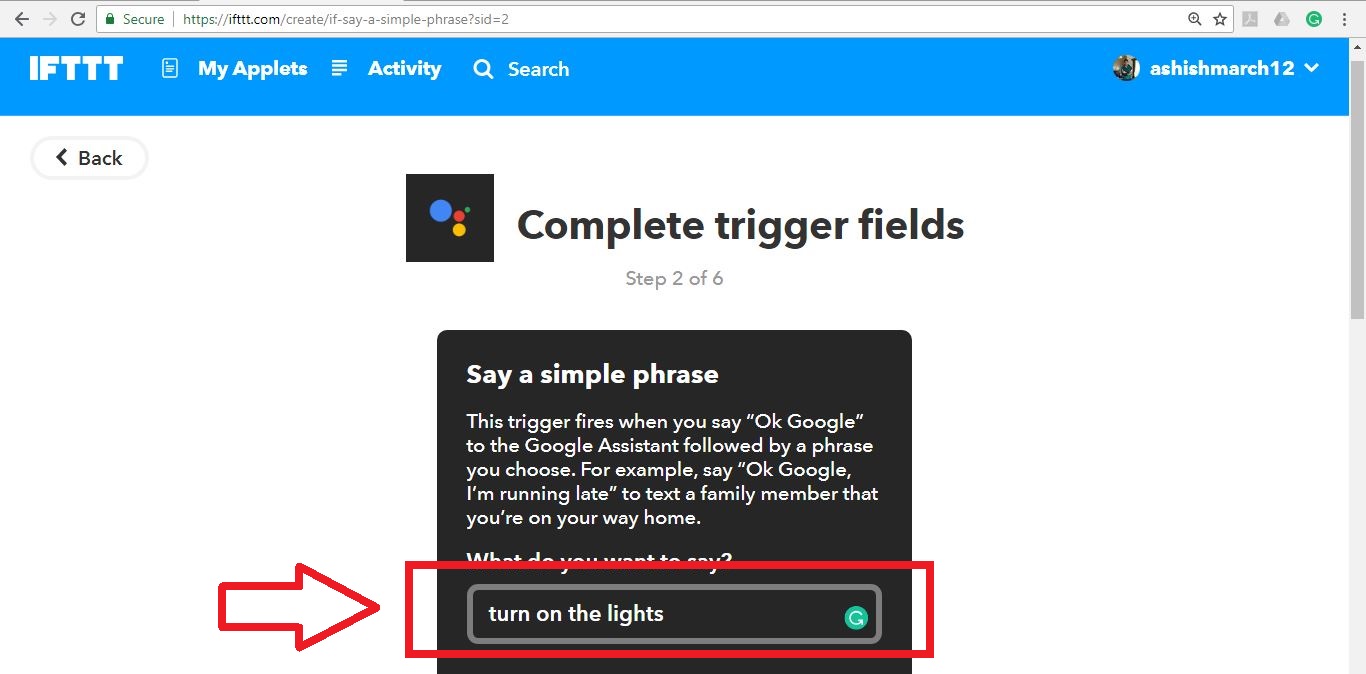
**Step 4:**  Choose Google Assistant from the list.

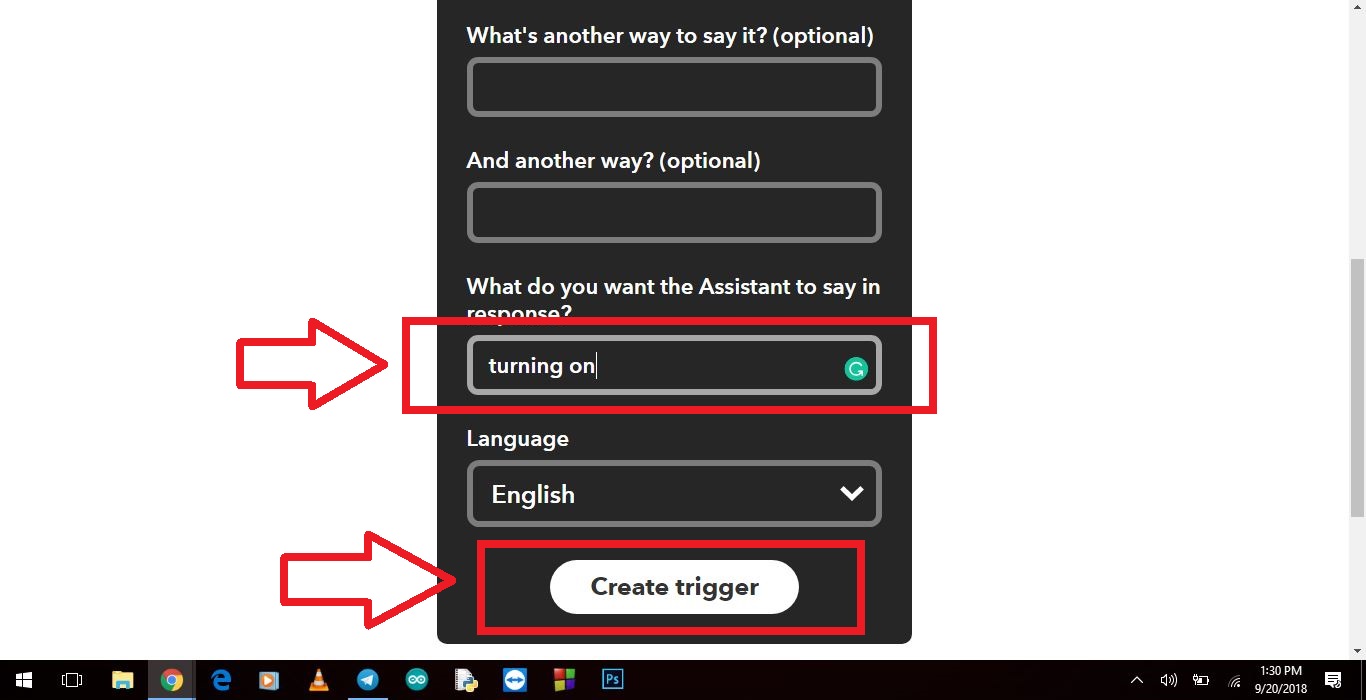


**Step 5:**  Click on “Say a simple phrase” applet.

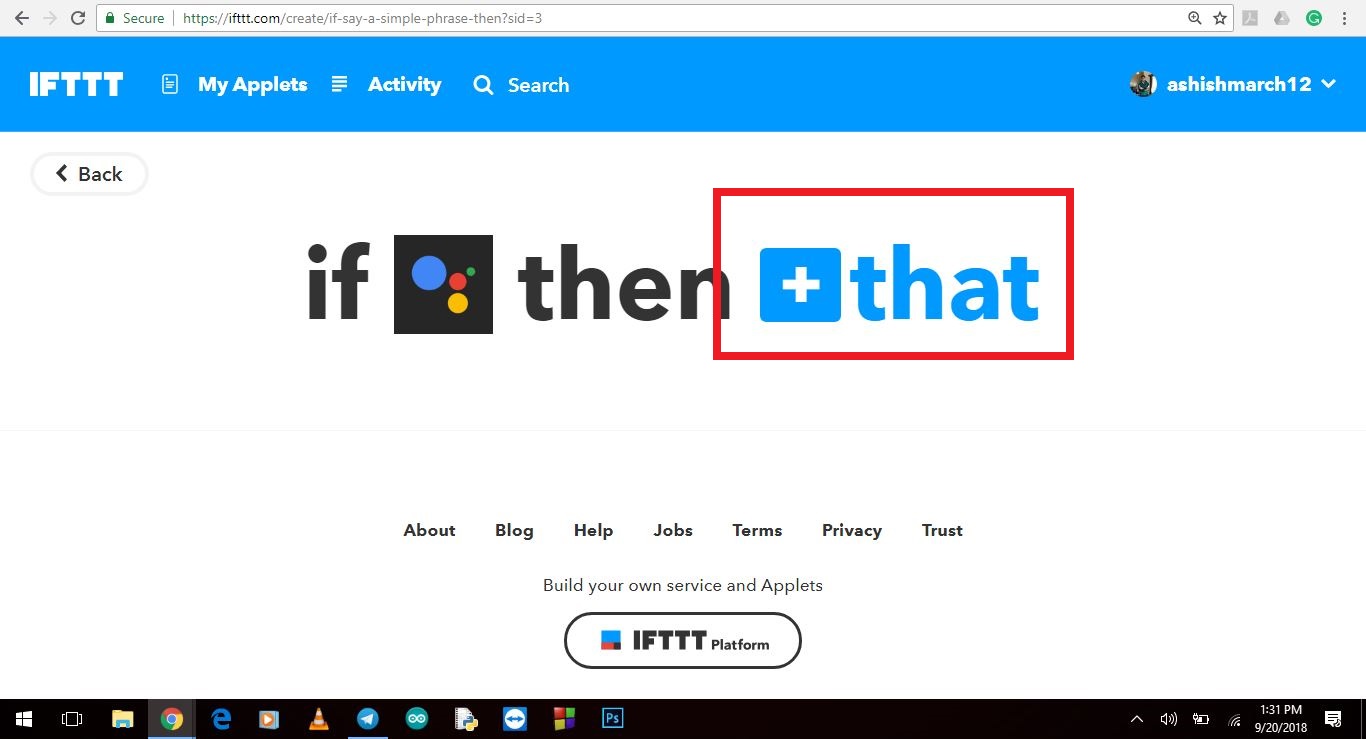


**Step 6:**  Fill the following fields and click “Create trigger”.

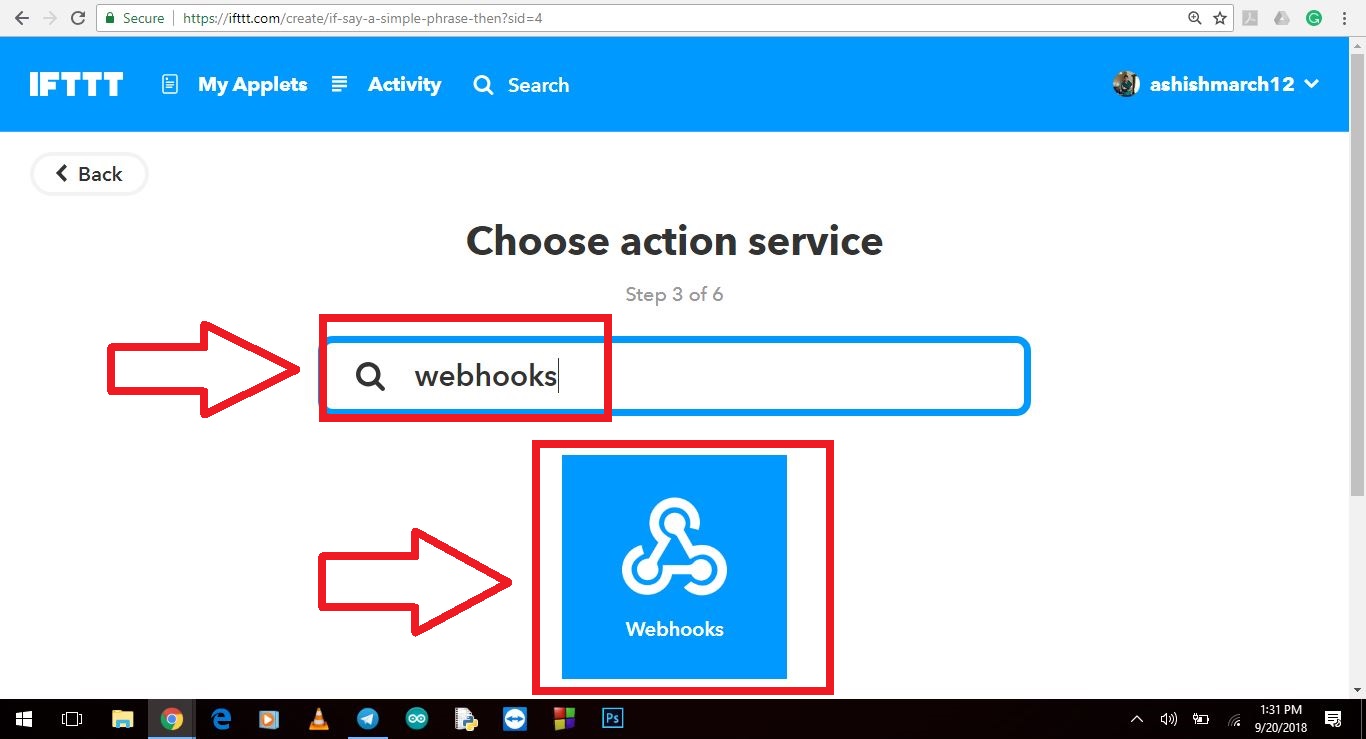




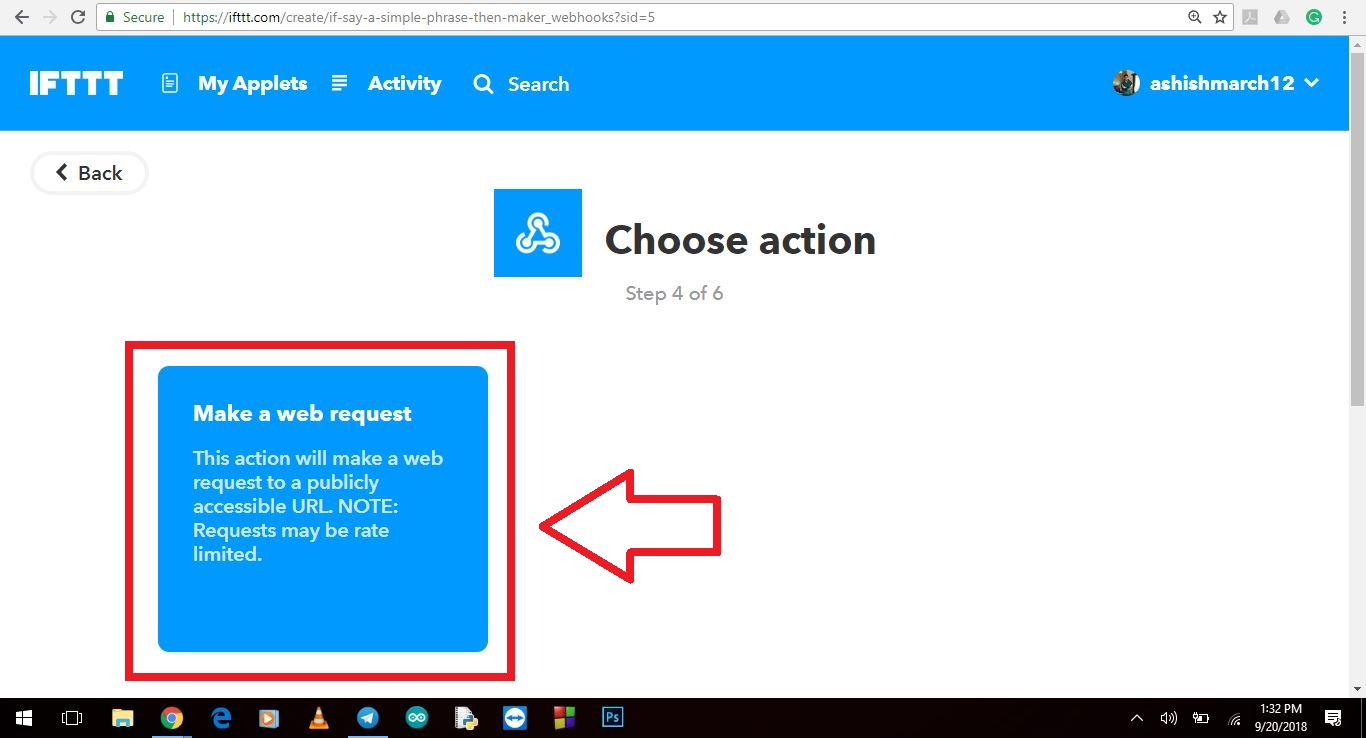
**Step 7:**  Click on “+that”.



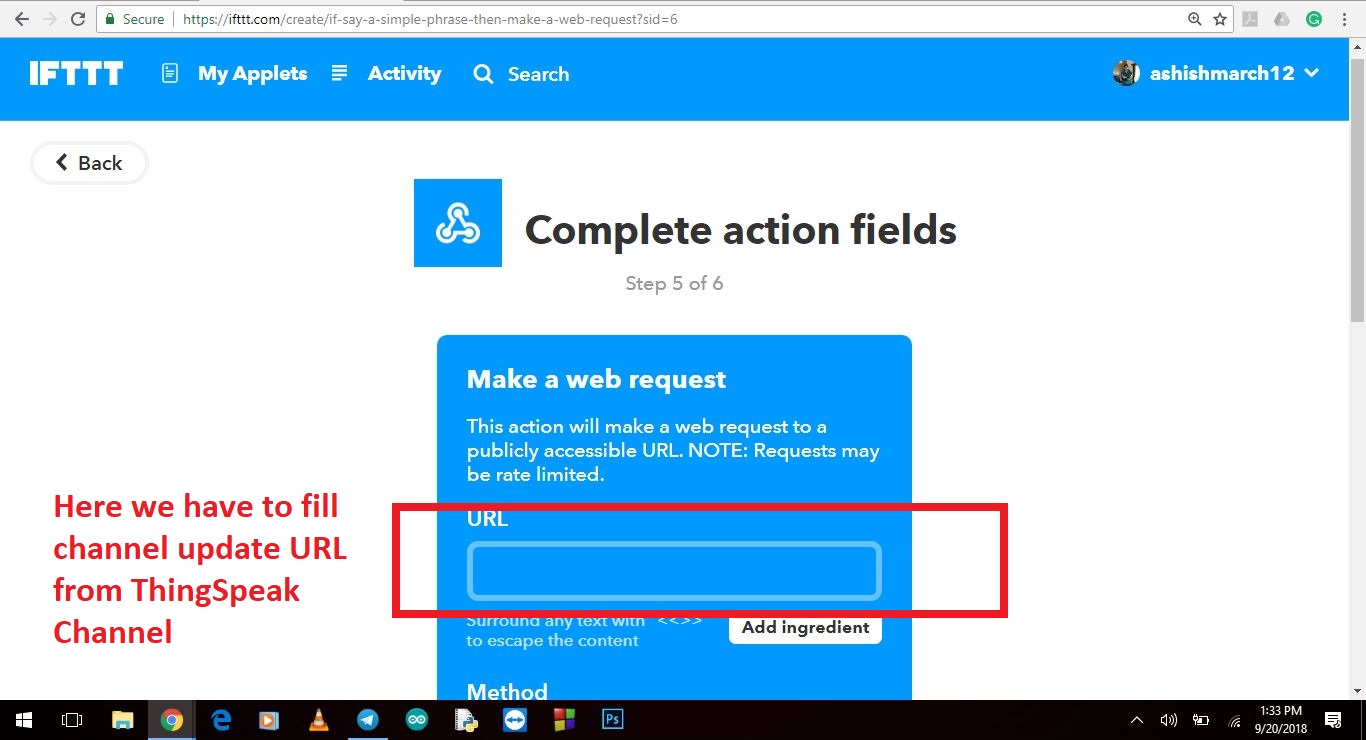
**Step 8:**  Search for webhooks and select it.



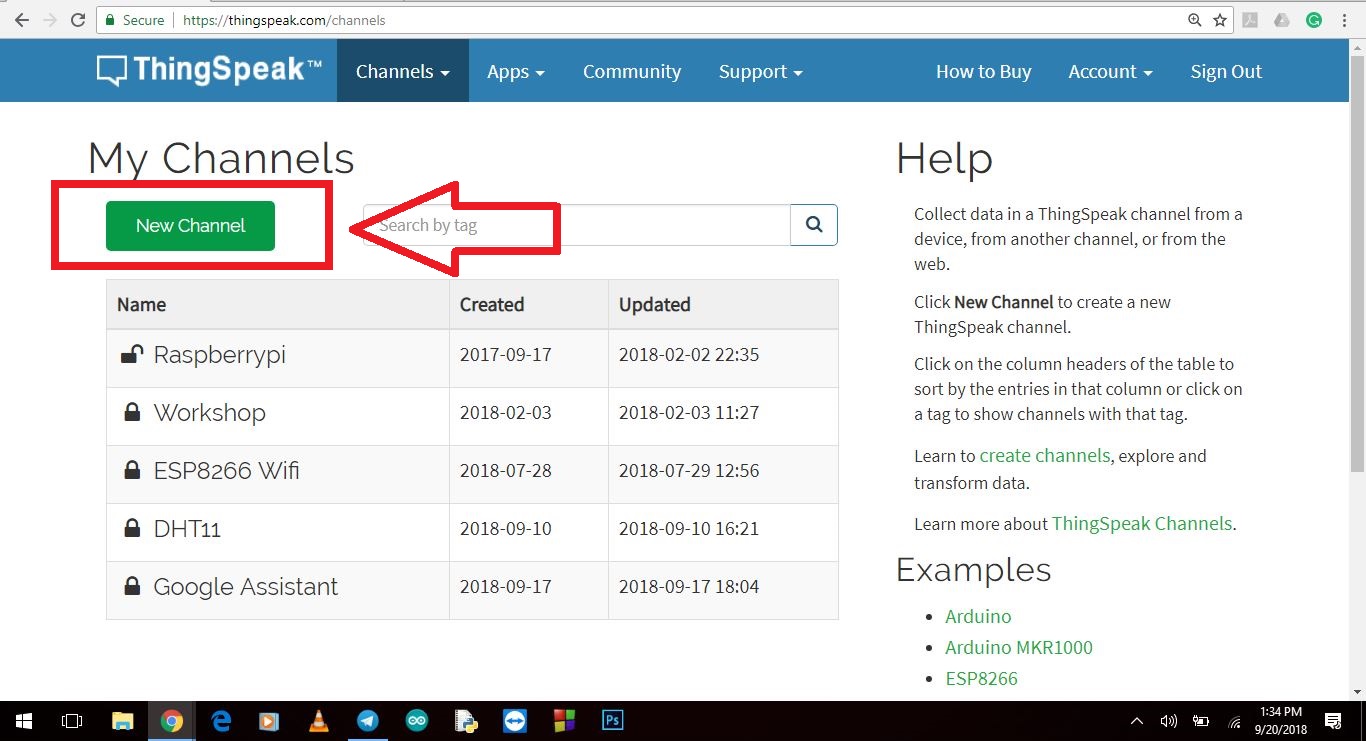
**Step 8:**  Choose action “Make a web request”.



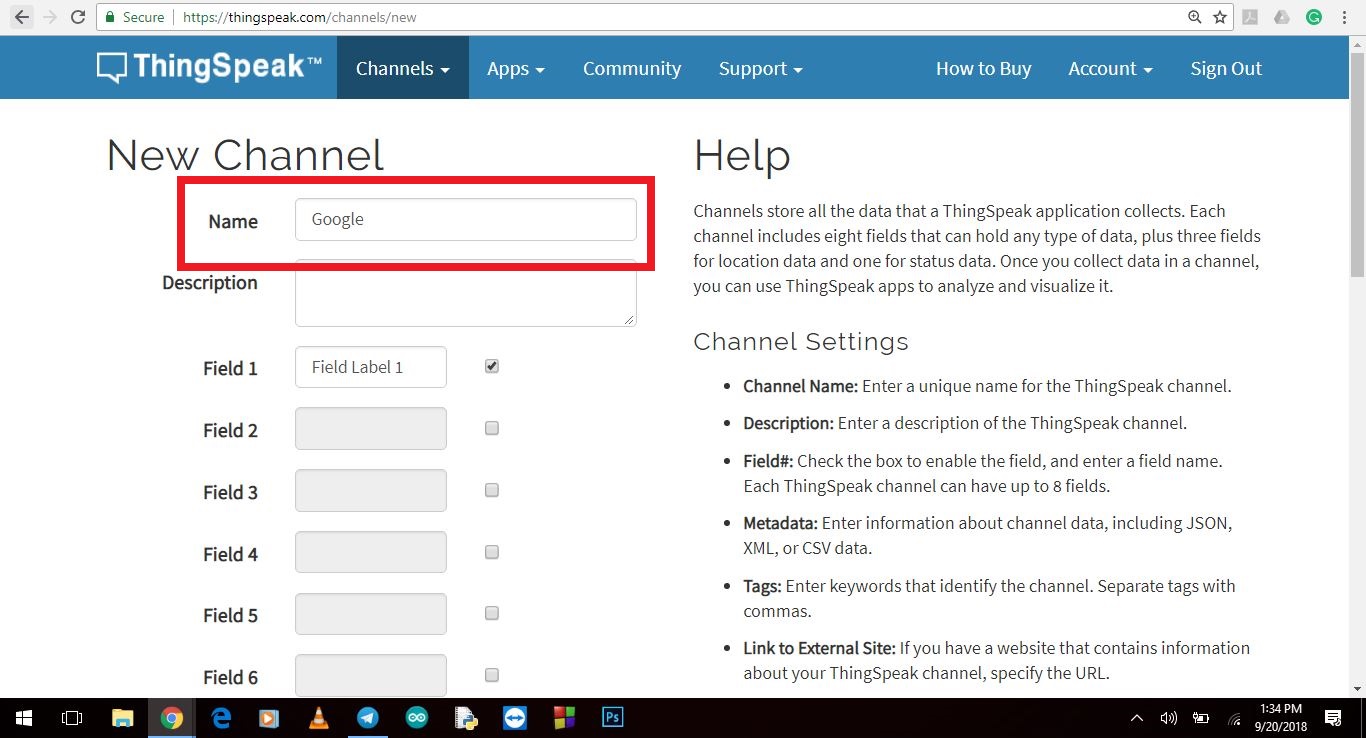
**Step 9:**  Here we have to fill the ThingSpeak Channel.

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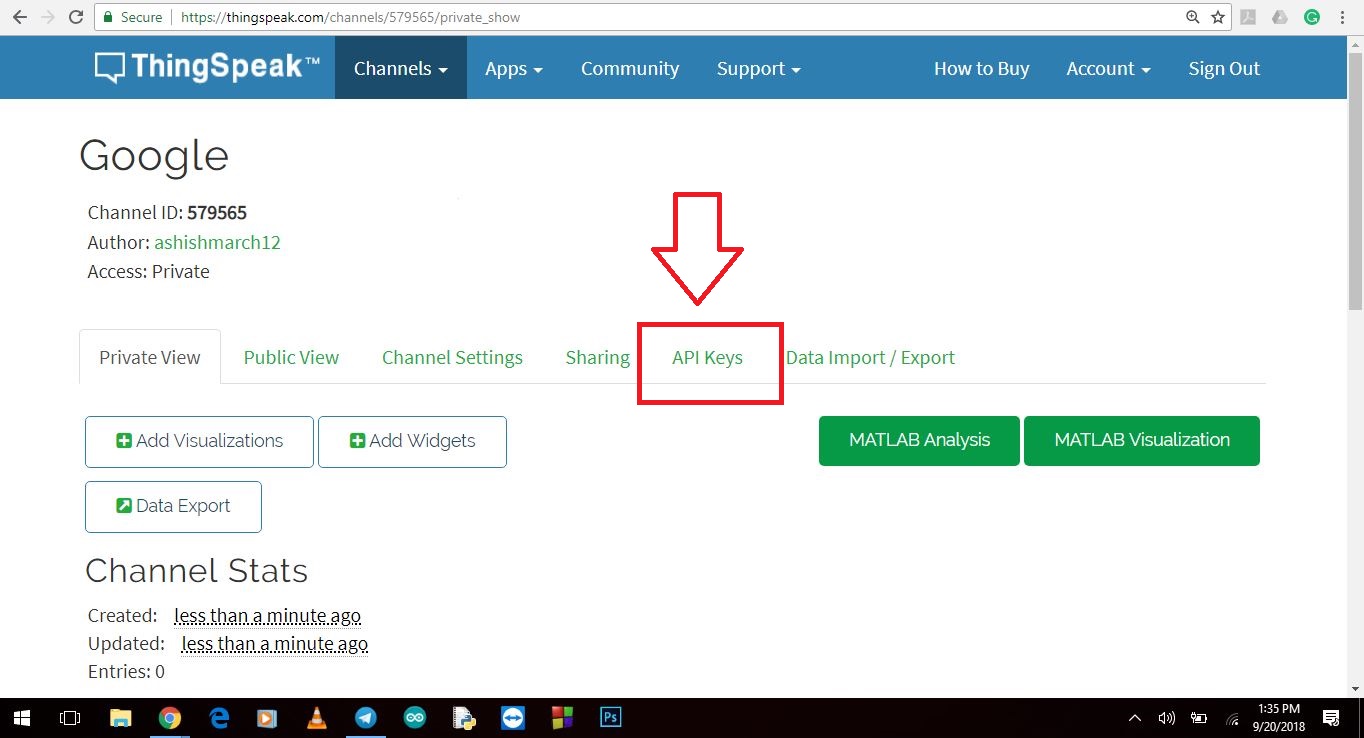
**Step 10:**  Goto Thingspeak.com, sign in to your account and create a new channel.



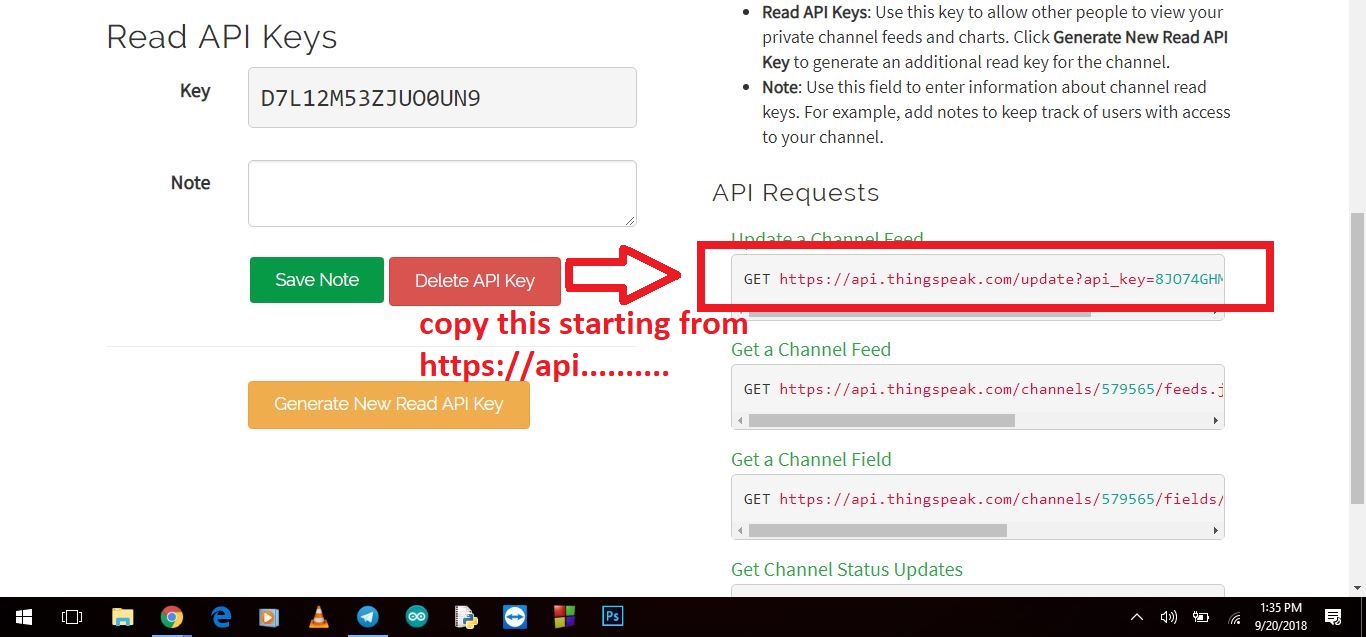
**Step 11:** Give this channel a name.



**Step 12:**  Click on “API” keys.



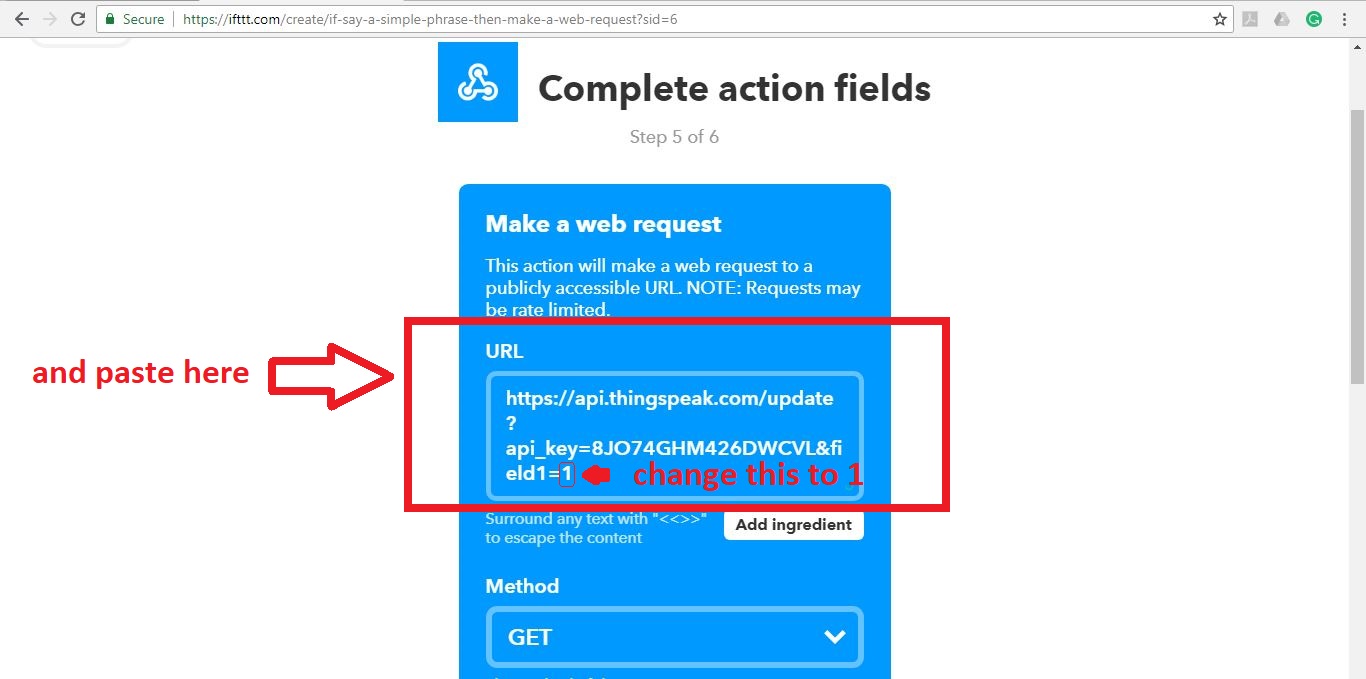
**Step 13:**  Copy the “Update channel feed” link. Make sure you don’t copy “GET” prefix written in front of it.

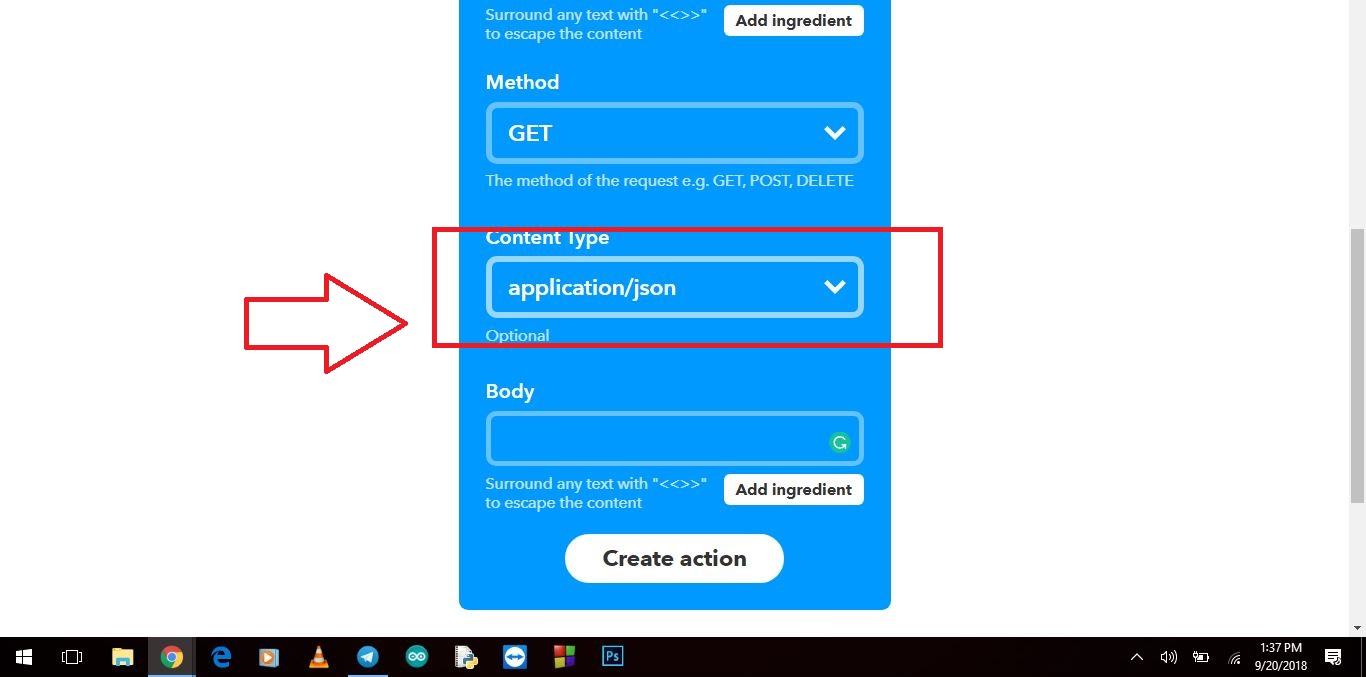


**Step 14:**  Paste the URL here and change the last values according to what data you want to send. The same data will be updated on ThingSpeak channel.

For eg: you can send “1” as a signal to turn on LED/Light.

And you can send “0” to turn it off.



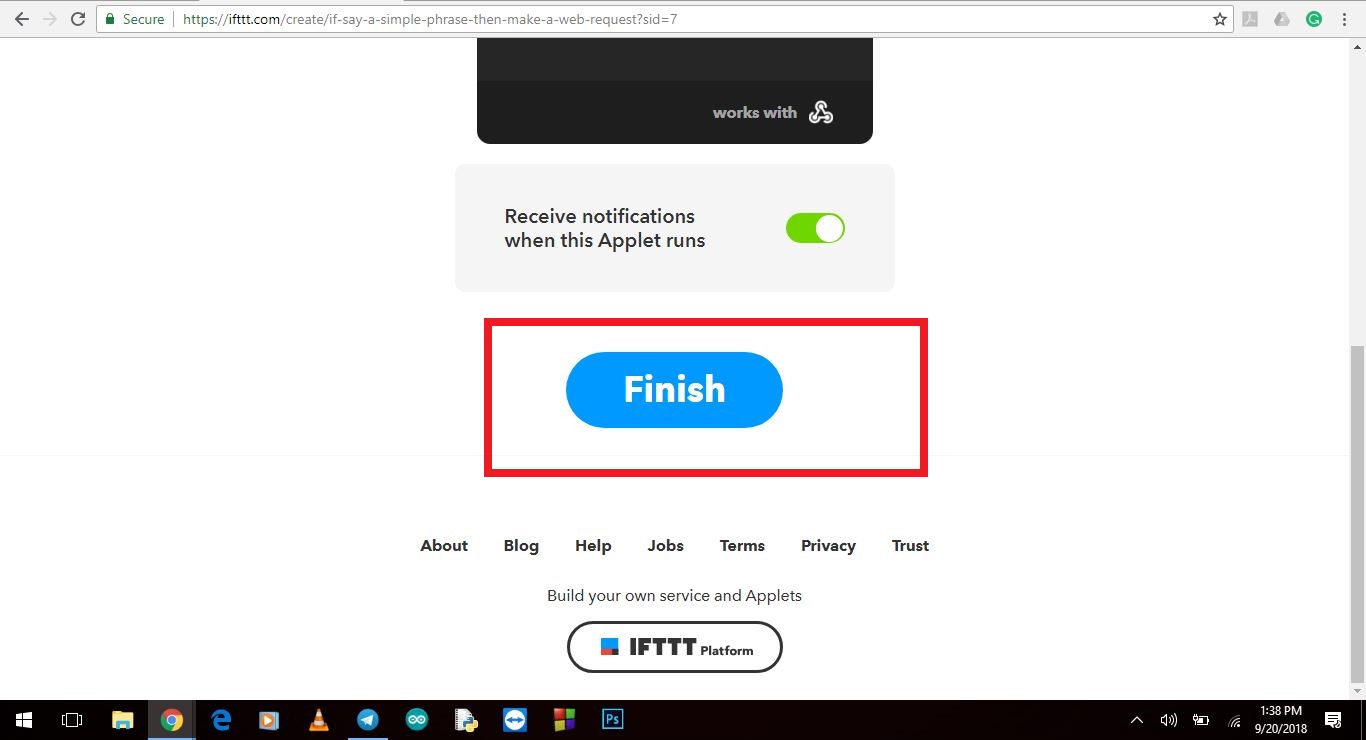


Make sure you select json from the Method drop down menu

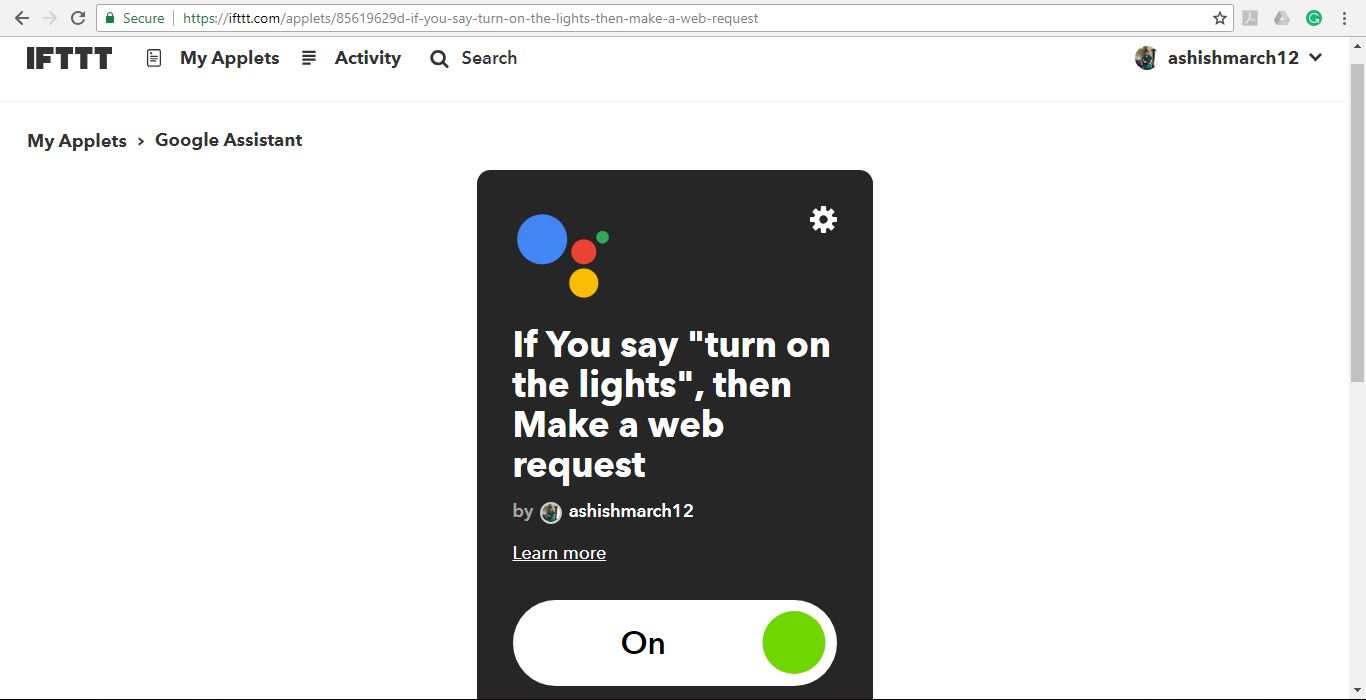
Select content type as application/json

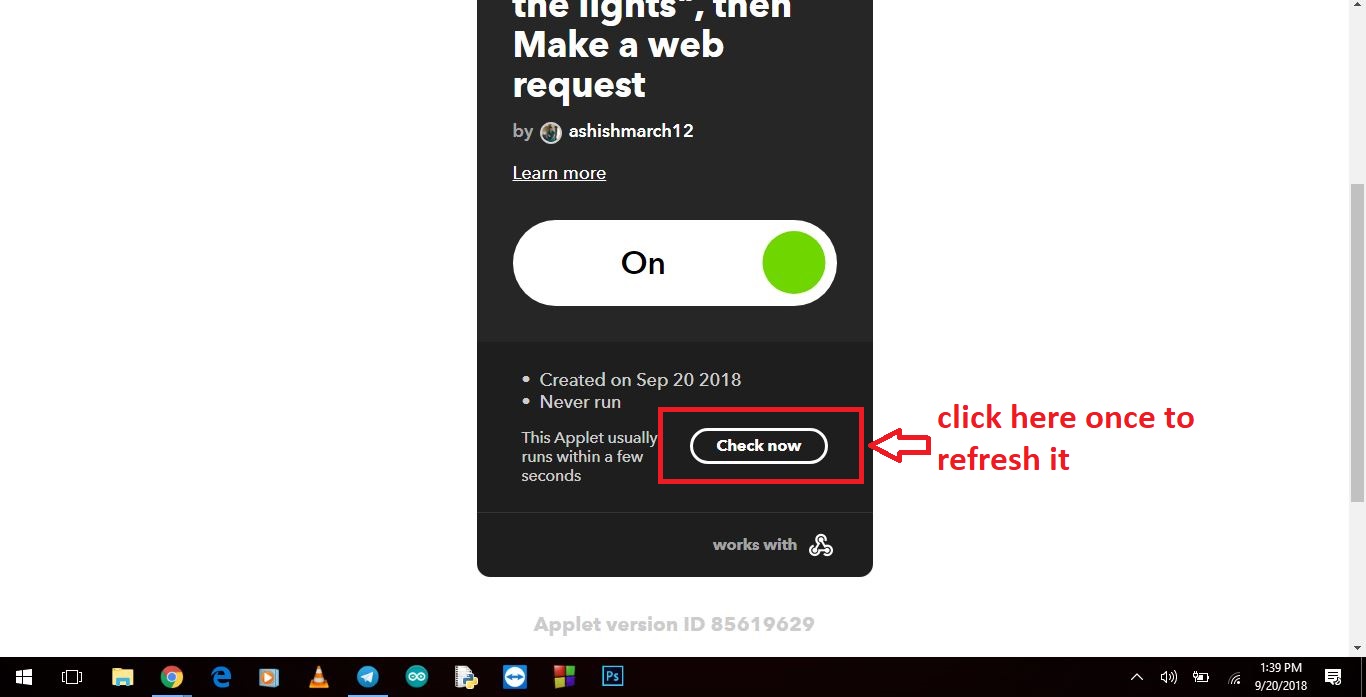
Now click on “Create action”.

**Step 15:**  Click on “Finish”.



**Step 16:**  Click on “check now”.





1. **­­­­­­­­­­­­Code to Fetch data from ThingSpeak Channel**

import json

import requests

import time

import RPi.GPIO as GPIO

led = 3

GPIO.setmode(GPIO.BOARD)

GPIO.setup(led,GPIO.OUT)

myserverURL = "https://www...... enter your URL here"

while(True):

data=requests.get(myserverURL)

if data.status\_code!=200:

print("error");

try:

data=json.loads(data.text)

except:

data=None;

if data!=None:

value =data["feeds"][0]["field1"]

print("value = %s" % (value))

if value=='1':

GPIO.output(led,True)

if value=='0':

GPIO.output(led,False)

time.sleep(0.01)