

Experiment Number

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Branch ::	CSE - IoT	Sec/Grp ::	1/A
Semester ::	5 th	Date ::	19 th Sept, 2021
Subject ::	DIOT Lab	CODE ::	CSD-337

1. Aim :

To Create Cloud IOT based Telemetric Channel over thingspeak cloud and use the interface to Receive on Remote system using LabVIEW.

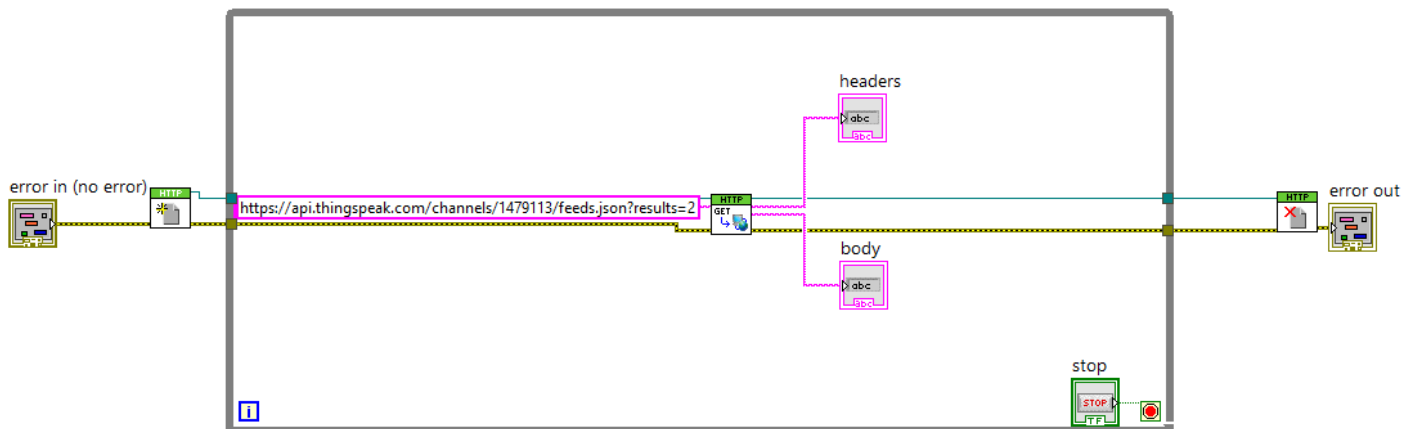
2. Task :

1. Create thingspeak account
2. Create a telemetric channel in thingspeak
3. Make channel created in step 2 as public
4. Write LabVIEW code for cloud interfacing
5. Run labview code
6. Examine the data from step 5 on LabVIEW interface created in step 2

3. Steps :

- On block panel first we have to create a while loop.
- Select the data communication and then protocol-HTTP open handle, HTTP get handle and HTTP close handle
- Create the connection as shown above in the diagram.
- Run the program and on the front panel result is shown.
- On header part URL credential is seen and on body part data is seen.


4. Source Flow :



LabVIEW™ Evaluation !

5. Observations :

error out

status	code
	200

source

headers

```
HTTP/1.1 200 OK
Date: Sun, 12 Sep 2021 11:07:04 GMT
Content-Type: application/json; charset=utf-8
Transfer-Encoding: chunked
Connection: keep-alive
Status: 200 OK
X-Frame-Options: SAMEORIGIN
Access-Control-Allow-Origin: *
Access-Control-Allow-Methods: GET, POST, PUT, OPTIONS, DELETE, PATCH
Access-Control-Allow-Headers: origin, content-type, X-Requested-With
Access-Control-Max-Age: 1800
Cache-Control: max-age=7, private
ETag: W/"716de8185c9331b369570645f0e899ae"
X-Request-Id: 4898f6bb-7086-4684-8419-98976018fc2e
```

body

```
{"channel":{"id":1479113,"name":"FireDetectInForestArea","description":"Fire in forest area is major concern these days","latitude":"30.6917665193","longitude":"76.7946597313","field1":"Tempearture","created_at":"2021-08-18T06:12:03Z","updated_at":"2021-09-10T16:20:19Z","last_entry_id":null,"feeds":[]}}
```

Learning Outcomes :

- Channel creation on ThingSpeak.
- Analyzing Lab View and perform simple operation.
- Retrieval of data on the cloud.
- Various HTTP, data communication and blocks in LabView.

S. No.	Parameters	Marks Obtained	Maximum Marks
1.			
2.			
3.			