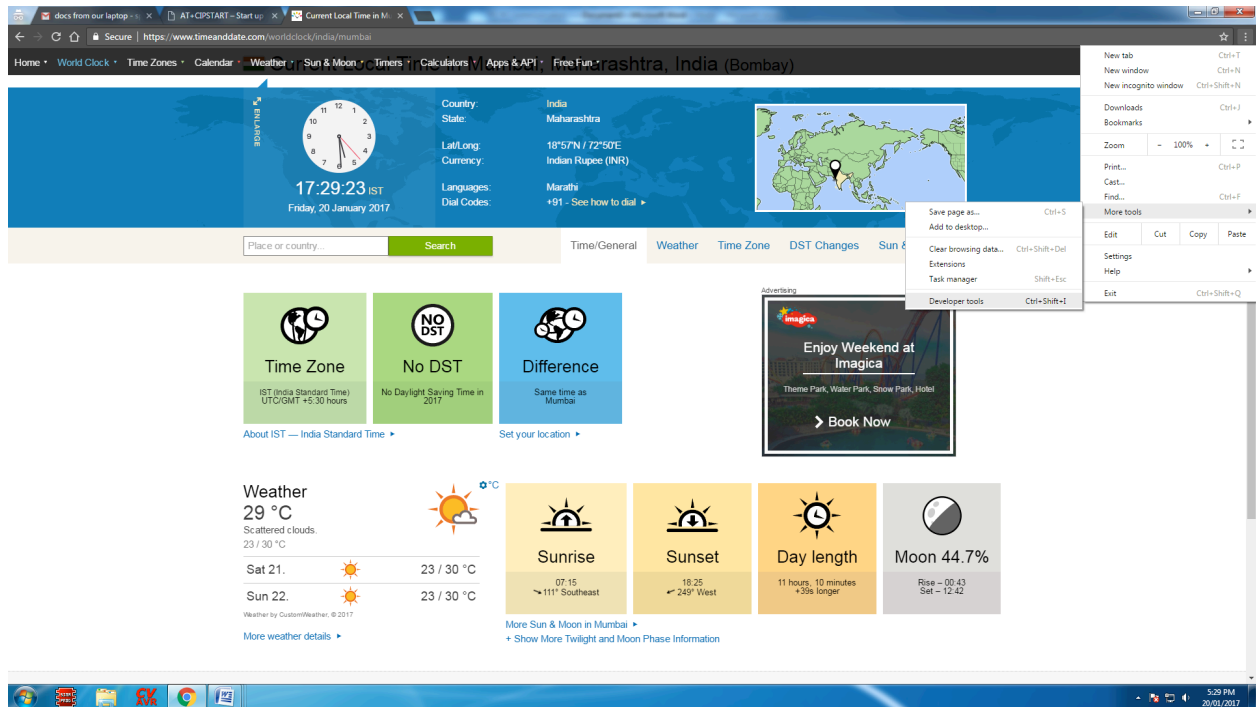


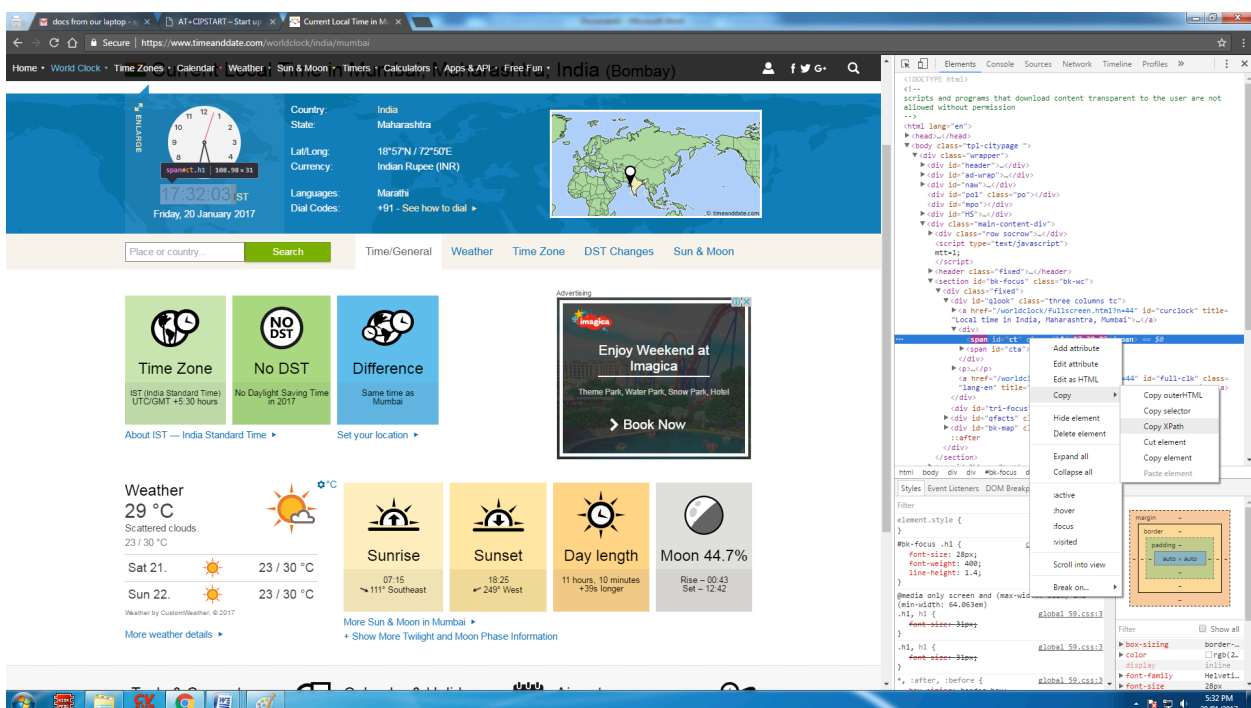
# Aim: ESP8266 as Client to get **Real-time data** from a website and display on ESP8266 Client (PC Terminal)

This example requires internet connection to your PC & Mobile as access Point (AP)

1. Go to the website you're interested in getting real time data from. In this case, we want time from [www.timeanddate.com](http://www.timeanddate.com) View the site code.

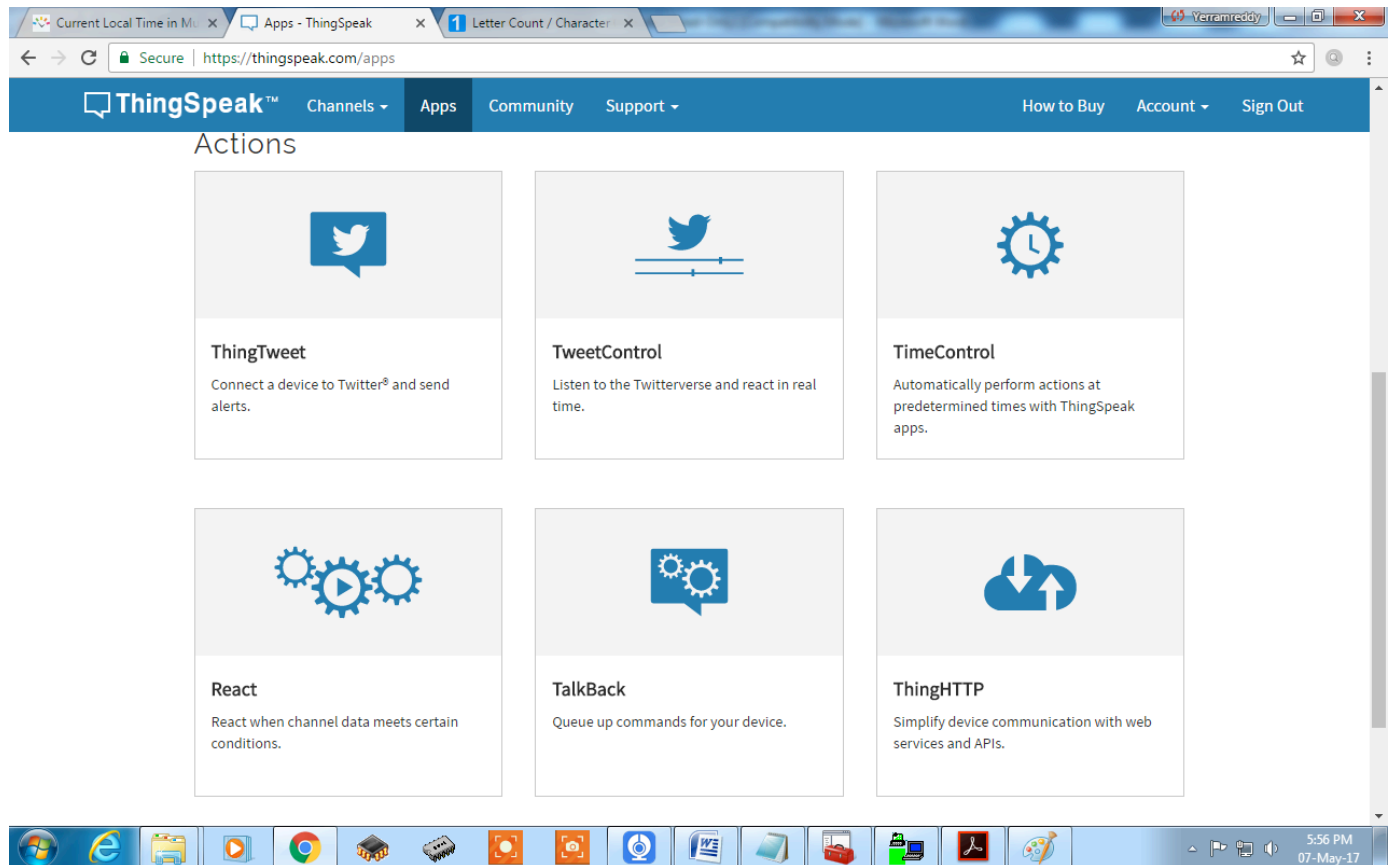


- Select the time, 17:29:23, right click and select “Inspect”. A program line will be highlighted in the code. Copy its X-path.

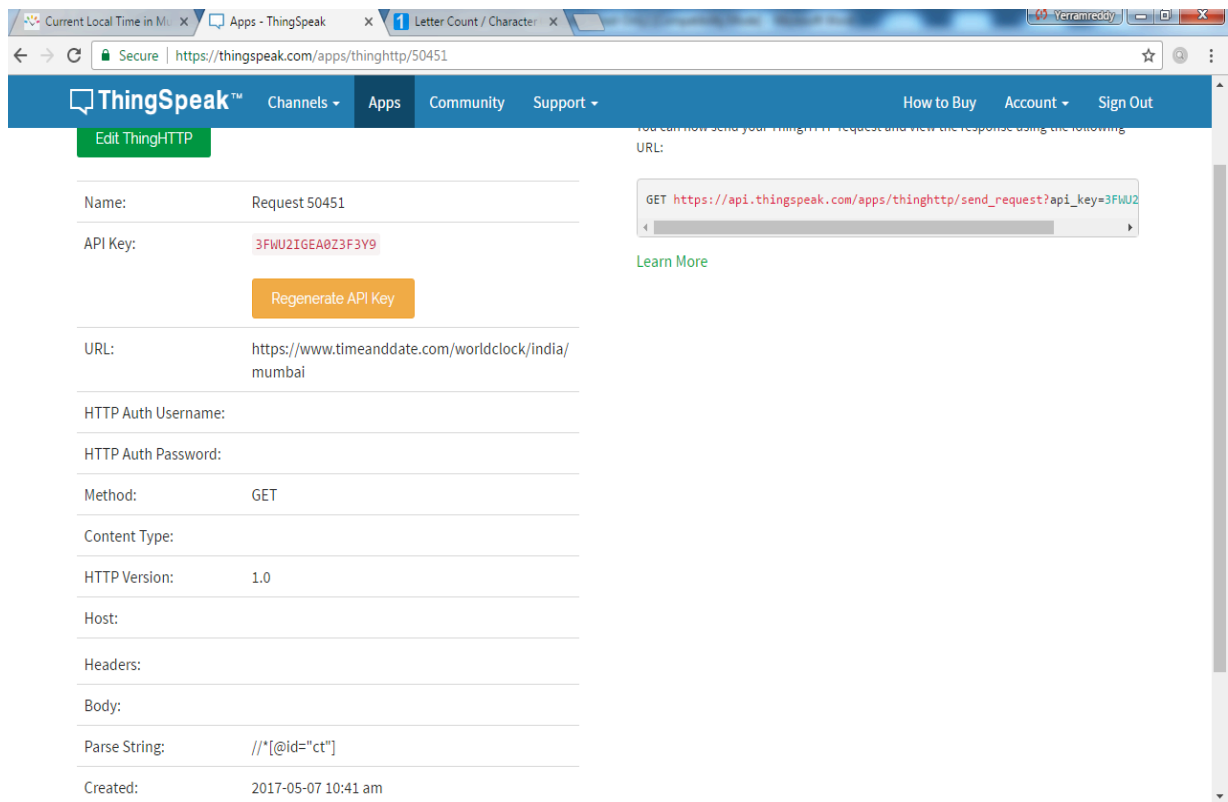


Aim: Create a project (Application Programming Interface (API) using [www.thingspeak.com](http://www.thingspeak.com) to extract the selected portion of data from [www.timeanddate.com](http://www.timeanddate.com) and send it to the client (ESP8266)

2. Go to [www.thingspeak.com](http://www.thingspeak.com), and make an account there. Go to apps>ThingHTTP, and select “new ThingHTTP”



3. Give a suitable name.
4. Paste the URL { <https://www.timeanddate.com/worldclock/india/mumbai>}
5. change HTTP version {1.0}
6. paste the copied X-path in parse string { `//*[@id="ct"]`}
7. And save.
8. Now your URL is generated.



GET [https://api.thingspeak.com/apps/thinghttp/send\\_request?api\\_key=Y0CZZZU90MX2DZSS](https://api.thingspeak.com/apps/thinghttp/send_request?api_key=Y0CZZZU90MX2DZSS)

- On searching on new window browser:  
[https://api.thingspeak.com/apps/thinghttp/send\\_request?api\\_key=Y0CZZZU90MX2DZSS](https://api.thingspeak.com/apps/thinghttp/send_request?api_key=Y0CZZZU90MX2DZSS)

real time data is displayed.

- Now open Real Term Connect ESP8266 to access point:

AT+CWMODE=3 ( 3-both modes simultaneously)

AT+CWLAP (displays list of available Wi-Fi networks)

AT+CWJAP="ysrao","12345678" (to join a Wi-Fi network)

AT+CIPSTART="TCP","api.thingspeak.com",80 (setup TCP connection & link of the data for download)

Rearrange the URL from Thinhsppeak:

[https://api.thingspeak.com/apps/thinghttp/send\\_request?api\\_key=3FWU2IGEA0Z3F3Y9](https://api.thingspeak.com/apps/thinghttp/send_request?api_key=3FWU2IGEA0Z3F3Y9) to

GET /apps/thinghttp/send\_request?api\_key=3FWU2IGEA0Z3F3Y9 HTTP/1.0\r\nHost:api.thingspeak.com\r\n\r\n

From <http://www.lettercount.com/> find out the number of characters (number of characters in

GET /apps/thinghttp/send\_request?api\_key=3FWU2IGEA0Z3F3Y9 HTTP/1.0\r\nHost:api.thingspeak.com\r\n\r\n  
are 101-6 = 95)

AT+CIPSEND=95

On receiving ">" as output, type

GET /apps/thinghttp/send\_request?api\_key=3FWU2IGEA0Z3F3Y9 HTTP/1.0\r\nHost:api.thingspeak.com\r\n\r\n

