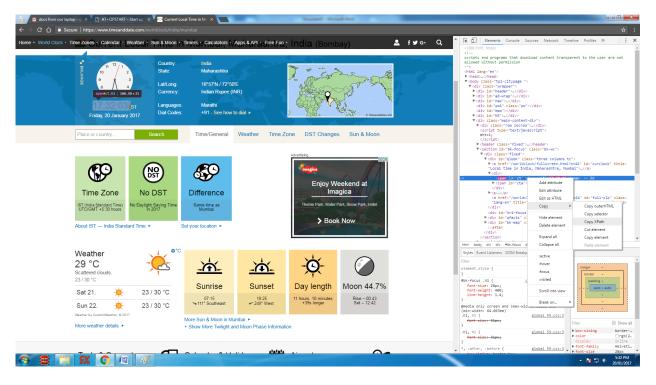
Aim: ESP8266 as Client to get **Real-time data** from a website and display on ESP8266 Client (PC Terminal)

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 View the site code.

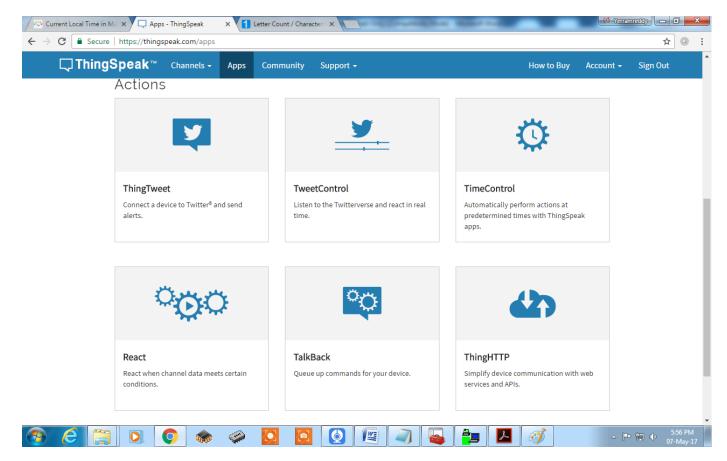
👼 🖉 docs from our laptop - si x 🔨 🕒 AT+CIPSTART – Start up 🛛 x Ϋ 🚟 Current Local Time in Mi 🗴 💽	Contract Report Manhood State			- 0 - X
← → C ☆ Secure https://www.timeanddate.com/worldclock/india/mumbai				☆ :
Home • World Clock • Time Zones • Calendar • Weather ; ; Sun & Meen ; ; Timers ; ; Calculators / A		a (Bombay)		New tab Ctrl+T New window Ctrl+N New incognito window Ctrl+Shift+N
Country State 17:29:23 ist Friday, 20 January 2017 Place or country Search	India Mahamashta 18'57N / 2'50'E Indian Rupee (NR) Marathi +91 - See how to dial ▶ Time/General Weather	Time Zone DST Changes Sun (Swe page 81 Ctrl+S Add to desktop Ctrl+Shilt-Del Clear browing data. Ctrl+Shilt-Del	Downloads Ctrl-J Bookmarks Ctrl-J Zoom - 100% • C 3 Print Ctrl+P Cast Find Ctrl+F More tools Edit Cut Copy
Image: Construction of the standard time in the standard tin the standard time in the standard time in the standard time in t	Difference Barre time as Set your location >	Enjoy Weekend at Imagica Theme Park, Wader Flark, Show Park, H Book Now		Settings Help Exit Ctri-Shift+Q
Weather 29 °C o* 23 / 30 °C 23 / 30 °C Sat 21. ↓ 23 / 30 °C Sun 22. ↓ 23 / 30 °C Wather try Custom/Ruther, 0 217 23 / 30 °C Wather try Custom/Ruther, 0 217 More weather details >	Sunrise Sunrise 07:15 111/3 Sutheast More Sun & Moon in Mumbal > + Show More Twilight and Moon Phase Informati	st +39s longer	000 44.7% Rise-00.43 Set - 12.42	
				▲ 隆 💭 🔶 5:29 PM

• 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 to extract the selected portion of data from www.timeanddate.com and send it to the client (ESP8266)

2. Go to <u>www.thingspeak.com</u>, 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.

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C Secure https://thin	ngspeak.com/apps/thinghttp/!	50451	\$
☐ ThingSpeak [™]	[™] Channels - Apps	Community Suppor	
Edit ThingHTTP			URL:
Name:	Request 50451		GET https://api.thingspeak.com/apps/thinghttp/send_request?api_key=3Fi&U2
API Key:	3FWU2IGEA0Z3F3Y9		✓ ► Learn More
	Regenerate API Key		
URL:	https://www.timeanddate mumbai	e.com/worldclock/india/	
HTTP Auth Username:			
HTTP Auth Password:			
Method:	GET		
Content Type:			
HTTP Version:	1.0		
Host:			
Headers:			
Body:			
Parse String:	//*[@id="ct"]		
Created:	2017-05-07 10:41 am		

GET 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=Y0CZZZU9OMX2DZSS

real time data is displayed.

3. 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 Thinhspeak:

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

RealTerm: Serial Capture Program 2.0.0.70						
busy s	*					
SEND OK usion Passenger 4.0.57						
5:41:17 pmCLOSED	E					
In Clear Freeze ?						
GET /apps/thinghttp/send_requiv Send Numbers Send ASCII EOL	Status Disconnect RXD (2) TXD (3) CTS (8) DCD (1)					
Dump File to Port						
You can use ActiveX automation to control me! Char Count:9924 CPS:0	Port: 3 115200 8N1 Non //					