

Use of Open Data in Hong Kong

Sammy Fung

sammy.hk

Incu-Lab ICE in StartMeUpHK - Open Data Initiative Gathering

2013/12/04

We want a better life with
public data.

We want a easier way to
access the public data.

Agenda

- What is Open Data ?
- Use of Open Source Software in web crawling.
- Starting new Open Source project hk0weather to create Open Weather Data.

Sammy Fung

- Software Developer
 - to use and develop open source software.
 - Perl → PHP → Python.
 - interests on Data Mining / Web Crawling.
 - own a startup of web and mobile technology.

Sammy Fung

- 15+ years in Open Source Communities.
 - Founding Chairman, Hong Kong Linux User Group.
 - Founding Chairman, Open Source Hong Kong.
 - Member, GNOME Asia committee.
 - Mozilla Representative
 - Member, program committee at COSCUP
 - Conference for Open Source Coders, Users and Developers.
 - Largest open source conference in Taiwan.

What is Open Data ?

Open Data

Three Laws of Open Government Data by David Eaves.

- 1.If it can't be spidered or indexed, it doesn't exist.
- 2.If it isn't available in open and machine readable format, it can't engage.
- 3.If a legal framework doesn't allow it to be repurposed, it doesn't empower.

<http://eaves.ca/2009/09/30/three-law-of-open-government-data/>

Open Data

- Tim Berners-Lee, the inventor of the Web.
 - 5stardata.info
 - 5 star deployment scheme of Open Data.

* One Star - Open Data

1. make your stuff available on the Web (whatever format) under an open license.
2. ~~make it available as structured data (e.g., Excel instead of image scan of a table)~~
3. ~~use non-proprietary formats (e.g., CSV instead of Excel)~~
4. ~~use URIs to denote things, so that people can point at your stuff.~~
5. ~~link your data to other data to provide context.~~

5stardata.info by Tim Berners-Lee, the inventor of the Web.

** Two Star - Open Data

1. make your stuff available on the Web (whatever format) under an open license.
2. make it available as structured data (e.g., Excel instead of image scan of a table)
3. ~~use non-proprietary formats (e.g., CSV instead of Excel)~~
4. ~~use URIs to denote things, so that people can point at your stuff.~~
5. ~~link your data to other data to provide context.~~

5stardata.info by Tim Berners-Lee, the inventor of the Web.

*** Three Star - Open Data

1. make your stuff available on the Web (whatever format) under an open license.
2. make it available as structured data (e.g., Excel instead of image scan of a table)
3. use non-proprietary formats (e.g., CSV instead of Excel)
4. ~~use URIs to denote things, so that people can point at your stuff.~~
5. ~~link your data to other data to provide context.~~

5stardata.info by Tim Berners-Lee, the inventor of the Web.

**** Four Star - Open Data

1. make your stuff available on the Web (whatever format) under an open license.
2. make it available as structured data (e.g., Excel instead of image scan of a table)
3. use non-proprietary formats (e.g., CSV instead of Excel)
4. use URIs to denote things, so that people can point at your stuff.
5. ~~link your data to other data to provide context.~~

5stardata.info by Tim Berners-Lee, the inventor of the Web.

***** Five Star - Open Data

1. make your stuff available on the Web (whatever format) under an open license.
2. make it available as structured data (e.g., Excel instead of image scan of a table)
3. use non-proprietary formats (e.g., CSV instead of Excel)
4. use URIs to denote things, so that people can point at your stuff.
5. link your data to other data to provide context.

5stardata.info by Tim Berners-Lee, the inventor of the Web.

Open Data in Hong Kong



Data.One App Competition
data.one.gov.hk/competition


Win cash prizes
ACT NOW

資料一線通
DATA·ONE

Datasets

Home > Data.One > Datasets

You can download, distribute, reproduce, re-use or hyperlink to Data.One datasets for commercial or non-commercial purposes free-of-charge!

 Suggestions

Find datasets

Expand All

Air pollution indices ▶

Buildings ▶

Charitable fund-raising activities ▶

2014 Digital 21 Strategy

Smarter Hong Kong
Smarter Living

Datasets

FAQs

News Subscription

Data.One App Competition

Terms and Conditions

Contact Us

Open Data in Hong Kong

- Data.One
 - <http://www.gov.hk/en/theme/psi>
 - released on 2011/3/31.
 - First App Competition on Data.One
 - Call for Submission now till 2014/02/28.

Weather Information in Hong Kong

- Hong Kong Observatory
 - Hourly Hong Kong Weather Report
 - Regional Weather in Hong Kong (10 min updates)
 - Weather Forecast and Weekly Weather Forecast
 - Typhoon Report and Forecast

Hong Kong Observatory RSS

Current Weather »

You have subscribed to "Current Weather."


☆ Bulletin updated at 23:02 HKT 12/06/2013 - At 11 p.m. at the Hong Kong Observatory : Air temperature : 24 degrees Celsius Relative Humidity	11:49 PM	🔗
☆ Bulletin updated at 22:02 HKT 12/06/2013 - At 10 p.m. at the Hong Kong Observatory : Air temperature : 25 degrees Celsius Relative	10:30 PM	🔗
☆ Bulletin updated at 21:02 HKT 12/06/2013 - At 9 p.m. at the Hong Kong Observatory : Air temperature : 25 degrees Celsius Relative Humidity	9:39 PM	🔗
☆ Bulletin updated at 20:02 HKT 12/06/2013 - At 8 p.m. at the Hong Kong Observatory : Air temperature : 25 degrees Celsius Relative Humidity	8:05 PM	🔗
☆ Bulletin updated at 19:02 HKT 12/06/2013 - At 7 p.m. at the Hong Kong Observatory : Air temperature : 25 degrees Celsius Relative Humidity	7:08 PM	🔗
☆ Bulletin updated at 18:02 HKT 12/06/2013 - At 6 p.m. at the Hong Kong Observatory : Air temperature : 25 degrees Celsius Relative Humidity	6:11 PM	🔗
☆ Bulletin updated at 17:02 HKT 12/06/2013 - At 5 p.m. at the Hong Kong Observatory : Air temperature : 26 degrees Celsius Relative Humidity	5:07 PM	🔗
☆ Bulletin updated at 16:02 HKT 12/06/2013 - At 4 p.m. at the Hong Kong Observatory : Air temperature : 26 degrees Celsius Relative Humidity	4:39 PM	🔗
☆ Bulletin updated at 15:02 HKT 12/06/2013 - At 3 p.m. at the Hong Kong Observatory : Air temperature : 26 degrees Celsius Relative Humidity	3:07 PM	🔗
☆ Bulletin updated at 14:02 HKT 12/06/2013 - At 2 p.m. at the Hong Kong Observatory : Air temperature : 26 degrees Celsius Relative Humidity	2:07 PM	🔗
☆ Bulletin updated at 13:02 HKT 12/06/2013 - At 1 p.m. at the Hong Kong Observatory : Air temperature : 26 degrees Celsius Relative Humidity :	1:30 PM	🔗
☆ Bulletin updated at 12:02 HKT 12/06/2013 - At noon at the Hong Kong Observatory : Air temperature : 25 degrees Celsius Relative Humidity :	12:23 PM	🔗
☆ Bulletin updated at 11:02 HKT 12/06/2013 - At 11 a.m. at the Hong Kong Observatory : Air temperature : 24 degrees Celsius Relative Humidity	Jun 12, 2013	🔗
☆ Bulletin updated at 10:02 HKT 12/06/2013 - At 10 a.m. at the Hong Kong Observatory : Air temperature : 24 degrees Celsius Relative Humidity	Jun 12, 2013	🔗


Hong Kong Observatory RSS

⌂ All items ▾ Mark all as read ▾ Feed settings... ▾ ☰ ☱ ⬆ ⬇ ⚙ ▾

Current Weather »

You have subscribed to "Current Weather."

☆ Bulletin updated at 23:02 HKT 12/06/2013 - At 11 p.m. at the Hong Kong Observatory : Air temperature : 24 degrees Celsius Relative Humidity 11:49 PM 

Bulletin updated at 23:02 HKT 12/06/2013 

by Hong Kong Observatory

At 11 p.m. at the Hong Kong Observatory :
Air temperature : 24 degrees Celsius
Relative Humidity : 77 per cent

The air temperatures at other places were:

Hong Kong Observatory	24 degrees ;
King's Park	25 degrees ;
Wong Chuk Hang	25 degrees ;
Ta Kwu Ling	25 degrees ;
Lau Fau Shan	24 degrees ;
Tai Po	25 degrees ;
Sha Tin	25 degrees ;
Tuen Mun	25 degrees ;
Tseung Kwan O	23 degrees ;
Sai Kung	25 degrees ;
Cheung Chau	23 degrees ;
Chek Lap Kok	26 degrees ;
Tsing Yi	25 degrees ;
Shek Kong	24 degrees ;
Tsuen Wan Ho Koon	23 degrees ;
Tsuen Wan Shing Mun Valley	25 degrees ;
Hong Kong Park	24 degrees ;
Shau Kei Wan	24 degrees ;
Kowloon City	24 degrees ;
Happy Valley	25 degrees ;
Wong Tai Sin	25 degrees ;
Stanley	25 degrees ;
Kwun Tong	24 degrees ;

Weather at Data.One

- I posted a blog 'Progress of Open Government Data in Hong Kong' on 2013/01/17.
- Weather at Data.One provides 7 dataset URLs, returns RSS (XML) format (Eng/TChi/SChi)
 - One word: Useless.
 - Data.One dataset (RSS) is completely different with HKO own paid service (XML).

Weather at Data.One

- Example - Current local weather report:
- Plain text report in RSS.
- Difference to quote report content:
 - Website: a pair of HTML tags, eg. `<PRE>....</PRE>`.
 - Data.One: a pair of RSS description tags, `<description>....</description>`.
- Other weather data is missing, eg. Regional temperature updates per each 12 mins.

Weather at Data.One

- Weather at Data.One is 'report' but not 'data'.
- Weather RSS is already released by HKO before launch of Data.One.
- Technically, json/xml format is better readable by computer programs.

Data.One

- In November 2013, 43 datasets are available.
 - JSON/XML = 18
 - RSS = 10
 - XLS = 6
 - CSV = 4
 - JPG/PNG = 3
 - HTML/MDB = 2

Data.One

- JSON/XML (18 datasets)
 - Air Pollution.
 - Past 24-hour Air Pollution Index from stations.
 - Approved Charitable Fund-raising Activities
 - Restaurant and Food Licences.
 - Details of facility locations.
 - Reward Notices from Police Force.
 - Marine Traffic (Arrival/Departure).
 - Traffic Speed and special news.
 - EventHK information.

Data.One

- RSS (10 datasets)
 - Weather Information (7 datasets)
 - Beach Water Quality (1 datasets)
 - Current Air Pollution Index range and forecase (2 datasets)

Data.One

- JPG/PNG (3 datasets)
 - Exhibition gallery of government building projects.
 - Speed map panels.
 - Traffic snapshot images.

Data.One

- CSV
 - Past Record of Air Pollution Index
 - Locations of Public Facility and GovWifi
 - Marine Shipping directory of HK
- HTML
 - HTML version of Marine Traffic.
- XLS, MDB
 - 2011 Population Census.
 - Property Market Statistics.
 - Monthly Digested Stats and Registers of Auth Persons from Building Dept.
 - Routes and fares of public transport.

Data.One

- Many departments does not release their useful data, and release current information available on their website.
 - Few of them keep available open data in their own.
- Most of them does not understand what is 'real' open data.
 - Data insteads of Information.
 - Open data format insteads of proprietary data format.
 - Useful of data.
- Some departments should manage their open data in better data structure.

Legco Meeting Minutes and Voting Results

投票 VOTE: 1
日期 DATE: 07/11/2012
時間 TIME: 05:39:55 下午 PM

動議 MOTION: 葉劉淑儀議員對何秀蘭議員的「同志平權」議案作出的修正案
AMENDMENT BY HON MRS REGINA IP TO HON CYD HO'S MOTION ON "EQUAL RIGHTS FOR PEOPLE OF DIFFERENT SEXUAL ORIENTATIONS"

動議人 MOVED BY: 葉劉淑儀 Mrs Regina IP

	功能團體 Functional Constituencies	地方選區 Geographical Constituencies	最後結果 Final Result
出席 Present	33	34	
投票 Vote	33	33	
贊成 Yes	9	21	
反對 No	16	8	
棄權 Abstain	8	4	
結果 Result	否決 Negatived	通過 Passed	否決 Negatived

個別表決如下 THE INDIVIDUAL VOTES WERE AS FOLLOWS:

議員 MEMBER	投票 VOTE	議員 MEMBER	投票 VOTE
功能團體 Functional Constituencies		地方選區 Geographical Constituencies	
何俊仁 Albert HO	贊成 YES	曾鈺成 TSANG Yok-sing	出席 PRESENT
涂謹中 James TO	棄權 ABSTAIN	李卓人 LEE Cheuk-yan	贊成 YES
劉皇發 Dr LAU Wong-fat	反對 NO	陳鑑林 CHAN Kam-lam	反對 NO
石禮謙 Abraham SHEK	反對 NO	梁耀忠 LEUNG Yiu-chung	贊成 YES
張宇人 Tommy CHEUNG	反對 NO	劉慧卿 Emily LAU	贊成 YES
馮檢基 Frederick FUNG	贊成 YES	譚耀宗 TAM Yiu-chung	反對 NO
方剛 Vincent FANG	反對 NO	王國興 WONG Kwok-hing	棄權 ABSTAIN
李國麟 Dr Joseph LEE	贊成 YES	湯家驊 Ronny TONG	贊成 YES
林健鋒 Jeffrey LAM	反對 NO	何秀蘭 Cyd HO	贊成 YES
梁君彥 Andrew LEUNG	反對 NO	陳克勤 CHAN Hak-kan	
黃定光 WONG Ting-kwong	反對 NO	Dr Priscilla LEUNG	反對 NO
李慧琼 Stanny LEE	反對 NO	梁美芬 WONG Kwok-kin	棄權 ABSTAIN
林大輝 Dr LAM Tai-fai		葉劉淑儀 Mrs Regina IP	贊成 YES
陳健波 CHAN Kin-por	棄權 ABSTAIN	謝偉俊 Paul TSE	贊成 YES
梁家駒 Dr LEUNG Ka-lau		梁家傑 Alan LEONG	贊成 YES
張國柱 CHEUNG Kwok-che	贊成 YES	梁國雄 LEUNG Kwok-hung	贊成 YES
葉國謙 IP Kwok-him	反對 NO	陳偉業 Albert CHAN	贊成 YES
吳亮星 NG Leung-sing	棄權 ABSTAIN	黃毓民 WONG Yuk-man	贊成 YES
何俊賢 Steven HO	反對 NO	毛孟靜 Claudia MO	贊成 YES
易志明 Frankie YICK	反對 NO	田北辰 Michael TIEN	贊成 YES

Legco Meeting Minutes and Voting Results



立法會重要表決紀錄

選擇議案 (由新至舊排列):

關於本網 [Facebook 專頁](#) [Android app](#) 電郵

修正國民教育科課程

「德育及國民教育科課程」議案

結果
因分組點票機制
被否決

16/6/2011

簡介 全民表決 留言

Like 990 +1 101

說明

贊成

15

反對

25

棄權/缺席

19



余若薇



陳淑莊



譚耀宗



劉江華



陳鑑林



葉國謙



李國寶



謝偉俊



詹培忠



吳靄儀



梁家傑



李麗琼



陳克勤



黃定光



張學明



李華明



鄭家富



陳偉業



湯家驊



李卓人



黃容根



譚偉豪



黃國健



王國興



黃毓民



梁國雄



梁耀忠



仲延資料



仲延資料



缺席



缺席

Legco Meeting Minutes and Voting Results

- In October 2013, LegCo start to publish voting results of House Committe in XML.
- It is not a part of Data.One project.
- My open source software on LegCo vote result XML:
 - <http://github.com/smamyfung/legcovotes>

Open Data is important to citizens.

User of Open Source Software in web crawling

Web Scraping

- a computer software technique of extracting information from websites. (Wikipedia)
- for business, hobbies, research purposes.

Web Scraping

- Look for right URLs to scrap.
- Look for right content from webpages.
- Saving data into data store.
- When to run the web scraping program ?

Use of Open Source Software in Web Crawling

- Use Open Source Tools to collect useful and meaningful machine-readable data.
- Doesn't need to wait provider to release data in machine-readable format.

Open Source Tools

- Python programming language
- with Regular Expression library
- Scrapy web crawling framework

Why python + scrapy ?

- python: my current favourite programming language for few years.
- scrapy: web crawling framework written in Python.

What is Scrapy ?

- An open source web scraping framework for Python.
- Scrapy is a fast high-level screen scraping and web crawling framework, used to crawl websites and extract structured data from their pages. It can be used for a wide range of purposes, from data mining to monitoring and automated testing.

Scrapy Features

- define data you want to scrapy
- write spider to extract data
- Built-in: selecting and extracting data from HTML and XML
- Built-in: JSON, CSV, XML output
- Interactive shell console
- Built-in: web service, telnet console, logging
- Others

Programme List of Paid TVs in 2004

INTERNET ARCHIVE WayBack Machine

http://www.21126888.com/timetable/tt_new.asp?chno=ch61&yyyyymmdd=

200 captures 9一月04-20四月13

六月 八月 十月

2003 2004 2005

Close X Help ?

有線電視 CABLE TV

全港至快至新至齊全
有線電視電子節目表
e-Programme List

節目推介

足球台 [61]

有線電視 4 電視月刊

最強電影帝國

中國銀行(香港) 儲蓄 十強有線財經

永隆銀行 投資全攻略

項項矚目

7月	S	M	T	W	T	F	S
	1	2	3	4	5	6	7
	8	9	10	11	12	13	14
	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
	29	30	31				
8月	S	M	T	W	T	F	S
				1	2	3	4
	5	6	7	8	9	10	11
	12	13	14	15	16	17	18
	19	20	21	22	23	24	25
	26	27	28	29	30		
9月	S	M	T	W	T	F	S
					1	2	
	3	4	5	6	7	8	9
	10	11	12	13	14	15	16
	17	18	19	20	21	22	23
	24	25	26	27	28	29	30
	31						

列印 Print

--- 請選擇頻道 / Please Select Channel ---

2004年8月5日 星期四 Thursday, 5th August, 2004

上午 AM

06:00	.森巴足球世界	.Inside the World of Brazilian Soccer
06:30	.歐洲足球雜誌 [B]	.European Football Show [B]
07:30	.西甲夏令營 - 華倫西亞 對 皇家馬德里 [B]	.Spanish Soccer League - Valencia vs Real Madrid [B]
09:30	.森巴足球世界	.Inside the World of Brazilian Soccer
10:00	.曼聯四角邀請賽 - 小保加 對 浦和紅鑽 [B]	.Tournament of Champions - Boca Juniors vs Urawa Red Diamonds [B]

下午 PM

12:00	.西甲夏令營 - 拉科魯尼亞	.Spanish Soccer League - Deportivo La Coruna vs
-------	----------------	---

PG=家長指引/Parent Guidance N=兒童不宜/Not suitable for children L=直播/Live DL=轉播/Delay Live
B=雙語廣播/Bilingual CS=中文字幕/Chinese Subtitle ES=英文字幕/English Subtitle

有線電視企業 HKC Enterprises

有線電視廣告銷售獨家總代理
The Exclusive Sales Distributor of
CABLE TV's Commercial Airtime

節目以電視台公布為準
Programme Schedules are subject
to final confirmation from the Station

21126888.com



Programme List of Paid TVs in 2004

- I want to know live football match was showing on which channel.
- Paid TV web site = M\$ + IIS + ASP + Flash
- Slow..... Very Slow..... Extremely Slow!
- Couldn't connect at any peak hours!
- Wrote my first web crawler in PHP in 2004.

Public Transportation in 2006-2010

- Kowloon Motor Bus (KMB)
 - No map view for a bus route
- Public Transportation Enquiry System (PTES)
 - Exteremly Poor, Ugly (or much worse) map UI on PTES.

HK Observatory and Joint Typhoon Warning Center

- Any typhoon is coming to Hong Kong ? And When will it come ?
- No easy data exchange format.
- No RSS nor ATOM.
- We aren't check websites everyday.

My Products

- WeatherHK ← ← ←
- TCTrack

WeatherHK

- <http://twitter.com/weatherhk>
- hourly current weather report
- weather forecast report
- tropical signal warning



The screenshot displays three tweets from the account WeatherHK (@weatherhk). Each tweet includes a profile picture of a coastal landscape, the account name, a timestamp, and a weather report in Chinese. The first tweet, posted 7 hours ago, reports a temperature of 25°C, 95% humidity, and rain, with a thunderstorm warning in effect until 6:30 PM on April 18th. The second tweet, posted 8 hours ago, provides a weather outlook for the next few days, mentioning rain and a clearing trend. The third tweet, also 8 hours old, offers a general forecast of cloudy conditions with occasional rain and thunderstorms, and mentions wind directions.

香港天氣 @weatherhk 7h
下午5時天文台錄得氣溫25度，相對濕度95%，雨。雷暴警告現正生效，有效時間至4月18日下午6時30分。
Expand

香港天氣 @weatherhk 8h
天氣展望：隨後一兩日間中有雨，下週初天氣稍涼及較為明朗。
Expand

香港天氣 @weatherhk 8h
天氣預測：多雲，間中有雨及有幾陣雷暴。部分地區有霧。氣溫介乎23至27度。吹和緩偏南風，明晚轉吹偏東風。
Expand

WeatherHK

- Backend: Python + Scrapy + Database + Twitter + NNTP.....
- Frontend: Twitter + Newsgroup



WeatherHK

- <http://twitter.com/weatherhk>
- Interview by MetroPop in 2009.



My Products

- WeatherHK
- TCTrack ← ← ←

TCTrack

- <http://sammy.hk/projects/tctrack/tctrack.php>
- Plot TC current and forecast tracks over Google Map.
- Source:
 - JTWC
 - HKO

西北太平洋熱帶氣旋路徑圖 (beta) <http://sammy.hk/project/tctrack/tctrack.php?past=0912>

Map Satellite Hybrid Terrain

Guangxi Guangdong Fujian Taiwan

Guangzhou Dongguan Shenzhen Macau Hong Kong

Hainan Vietnam

颱風韋森特 (2012年)
Typhoon Vicente
聯合颱風警報中心 (JTWC): 09W
July 2012, 950 hPa, 175km/h

香港人的窗簾舖 - 奔馳布藝
www.curtainshop...
您的窗簾專家-全面照顧您家居辦公室的窗簾需要-港九新界上門度呔睇板服務。

TC Track for HK
tctrack

tctrack #JTWC Tropical Disturbance at 10.6N 99.3E was moved to 11.4N 102.9E and downgraded to low formation potential.. bit.ly/tctrack

tctrack #JTWC Tropical Disturbance at 10.2N 98.6E was moved to 10.6N 99.3E in medium state. bit.ly/tctrack

tctrack #JTWC Tropical Disturbance at 7.6N 128.7E was moved to 7.6N 128.0E in low state. bit.ly/tctrack

Join the conversation

last update of JTWC [past/forecast](#) tracks: 18 Apr 13 13:18

last update of HKO [past/forecast](#) tracks: 24 Oct 12 12:03

boundary lines of 800/400 /200/100km from Hong Kong and HKO tropical cyclone observation area are added.

date/time are shown in Hong Kong time.

data are automatically updated by

GROUPON 餐飲優惠券* 低至三折* 看今日團購▶ 即將公布的優惠

TCTrack

- <http://sammy.hk/projects/tctrack/tctrack.php>
- Probably first tctrack map in HK using GoogleMap
- Use of GMap: TCTrack -> Weather
Underground Hong Kong -> HKO



TCTrack

- <http://twitter.com/tctrack>
- Tweet JTWC updates for Northwest Pacific.



The image shows a screenshot of the Twitter profile page for the account @tctrack. The profile is for "TC Track for HK" and is followed by the user. The bio states: "A beta version of tropical cyclones information updates in northwest pacific for Hong Kong. @tctrack is developed by @sammyfung. Hong Kong · <http://sammy.hk/project/tctrack/tctrack.php>". The profile statistics show 3,365 tweets, 3 following, and 153 followers. The "Tweets" section displays several updates regarding JTWC Tropical Disturbance movements and downgrades, including coordinates and dates.

Home @ Connect # Discover Me Search

Tweets

Following

Followers

Favorites

Lists

Tweet to TC Track for HK

@tctrack

Who to follow · Refresh · View all

Ella Koon @ellakoongmb
Followed by Nicole Ho and others
Follow

9to5Mac @9to5mac
Followed by leman and others
Follow

phoronix @phoronix
Followed by 譚耀老 and others
Follow

Browse categories · Find friends

Trends · Change

Hong Kong

China

Beijing

Boston

Not Specified

#food

London

TC Track for HK @tctrack
FOLLOWS YOU
A beta version of tropical cyclones information updates in northwest pacific for Hong Kong. @tctrack is developed by @sammyfung.
Hong Kong · <http://sammy.hk/project/tctrack/tctrack.php>

3,365 TWEETS 3 FOLLOWING 153 FOLLOWERS

Following

Tweets

TC Track for HK @tctrack 21h
#JTWC Tropical Disturbance at 10.6N 99.3E was moved to 11.4N 102.9E and downgraded to low formation potential.. bit.ly/tctrack
Expand

TC Track for HK @tctrack 17 Apr
#JTWC Tropical Disturbance at 10.2N 98.6E was moved to 10.6N 99.3E in medium state. bit.ly/tctrack
Expand

TC Track for HK @tctrack 21 Mar
#JTWC Tropical Disturbance at 7.6N 128.7E was moved to 7.6N 128.0E in low state. bit.ly/tctrack
Expand

TC Track for HK @tctrack 21 Mar
#JTWC found a new Tropical Disturbance at 7.6N 128.7E in low state. bit.ly/tctrack

Releases information to citizens
in a better presentation.

Starting new Open
Source project
hk0weather to create
Open Weather Data.

Starting new Open Source projects to create Open Data

- Develop a open source project.
- Release data in standard machine-readable data format.

hk0weather

- <https://github.com/sammyfung/hk0weather>
- Open Source Hong Kong Weather Project.
- convert to JSON data from HKO webpages.
- python + scrapy
- 1st version: from current weather report, extracting temperature and humidity from 20+ weather stations, export in json format.

hk0weather

- `https://github.com/sammyfung/hk0weather`
- `$ virtualenv hk0weatherenv`
- `$ source hk0weatherenv/bin/activate`
- `$ pip install scrapy`
- `$ git clone`
`https://github.com/sammyfung/hk0weather.git`
- `$ cd hk0weather`
- `$ scrapy crawl currwx -t json -o testresult`

hk0weather

- Python
 - import re
- Scrapy
 - web crawling framework written in Python.
 - HtmlXPathSelector.
 - built-in JSON, CSV, XML output.

hk0weather

```
{ "humidity": 80, "station": "hko", "temperture": 17, "time": 1360785720},
{"station": "kingspark", "temperture": 16, "time": 1360785720},
{"station": "wongchukhang", "temperture": 17, "time": 1360785720},
{"station": "takwuling", "temperture": 16, "time": 1360785720},
{"station": "laufaushan", "temperture": 15, "time": 1360785720},
{"station": "taipo", "temperture": 16, "time": 1360785720},
{"station": "shatin", "temperture": 17, "time": 1360785720},
{"station": "tuenmun", "temperture": 17, "time": 1360785720},
{"station": "tseungkwano", "temperture": 16, "time": 1360785720},
{"station": "saikung", "temperture": 16, "time": 1360785720},
{"station": "cheungchau", "temperture": 17, "time": 1360785720},
{"station": "cheungchau", "temperture": 17, "time": 1360785720},
{"station": "tsingyi", "temperture": 17, "time": 1360785720},
{"station": "shekkong", "temperture": 15, "time": 1360785720},
{"station": "tsuenwanhokoon", "temperture": 15, "time": 1360785720},
{"station": "tsuenwanshingmunvalley", "temperture": 17, "time": 1360785720},
{"station": "hongkongpark", "temperture": 17, "time": 1360785720},
{"station": "shaukeiwan", "temperture": 16, "time": 1360785720},
{"station": "kowlooncity", "temperture": 16, "time": 1360785720},
{"station": "happyvalley", "temperture": 18, "time": 1360785720},
{"station": "wongtaisin", "temperture": 17, "time": 1360785720},
{"station": "stanley", "temperture": 16, "time": 1360785720},
{"station": "kwuntong", "temperture": 15, "time": 1360785720},
{"station": "shamshuipo", "temperture": 17, "time": 1360785720}
```

Items.py

```
class Hk0WeatherItem(Item):  
    time = Field()  
    station = Field()  
    temperture = Field()  
    humidity = Field()
```

Currx.py

```
start_urls = (
```

```
'http://www.weather.gov.hk/wxinfo/currx/curr  
entc.htm',
```

```
)
```

Currx.py

```
def parse(self, response):  
    laststation = "  
    temperture = int()  
    stations = []  
    hxs = HtmlXPathSelector(response)  
    report = hxs.select('//div[@id="ming"]')
```

libhk0

```
class hk0:
```

```
    stations = [
```

```
        (u'天文台 ', 'hko'),
```

```
        (u'京士柏 ', 'kingspark'),
```

```
        (u'黃竹坑 ', 'wongchukhang'),
```

```
        (u'打鼓嶺 ', 'takwuling'),
```

```
        (u'流浮山 ', 'laufaushan'),
```

libhk0

```
class hk0:  
    def gettime(self, report):  
        ...  
  
    def hk0current(self, report):  
        ...
```


Agenda

- What is Open Data ?
- Use of Open Source Software in web crawling.
- Starting new Open Source project hk0weather to create Open Weather Data.

We want a easier way to
access the public data.

We want a better life with
public data.

Thank You!

sammy.hk