Twitter

Il prodotto da costruire

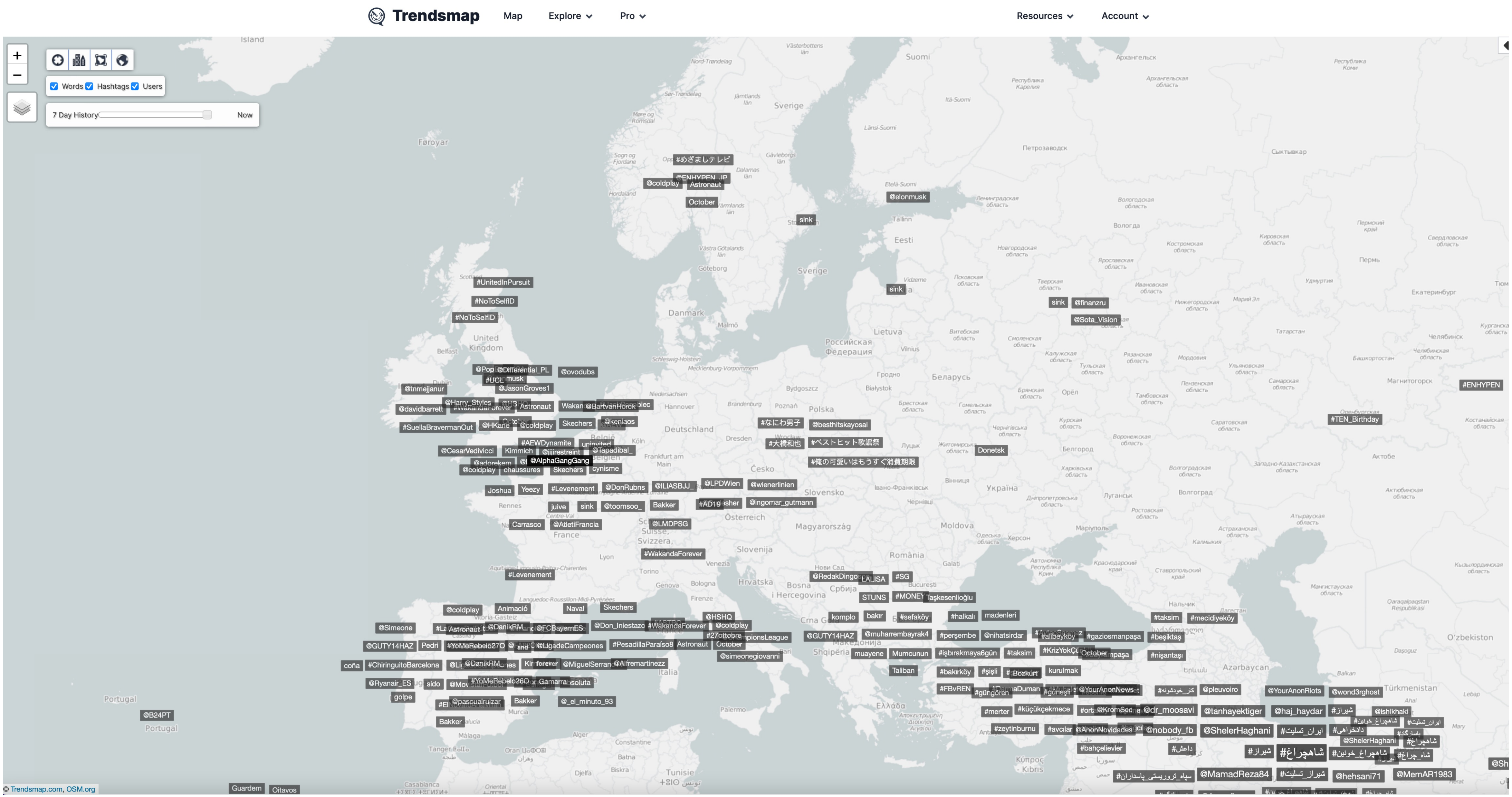
- Un client per Twitter
- Studiare e sfruttare le API
- Aggiungere funzioni di visual analytics
- Esempi di codice disponibili

L'obiettivo generale del progetto è quello di creare un'applicazione in grado di raccogliere i tweet, organizzarli e visualizzarli in forma aggregata con varie visualizzazioni

Nello specifico, quest’anno vogliamo giocare coi tweet

Cosa sono i client Twitter

- Browser
- Client «slim» come app per gli smartphone
  - Esempi: https://www.slant.co/topics/1216/~best-twitter-clients-for-android
- Client «fat»
  - esempio Trendsmap https://www.trendsmap.com



Trendsmap
Map
Explore
Pro
Resources
Account
Words
Hashtags
Users
7 Day History
Now
#UnitedInPursuit
#NoToSelfID
@ovodubs
@tnmejjanur
@davidbarrett
#SuellaBravermanOut
@JasonGroves1
@Harry_Styles
Astronaut
Skechers
@coldplay
#AEWDynamite
@CesarVedivicci
Kimmich
@AlphaGangGang
chaussures
cynisme
Joshua
Yeezy
#Levenement
@DonRubns
@LPDWien
@wienerlinien
@ingomar_gutmann
juive
sink
Bakker
Carrasco
@AtletiFrancia
@LMDPSG
#WakandaForever
#めざましテレビ
@coldplay
October
@elonmusk
sink
@finanzru
@Sota_Vision
#ENHYPEN
#TEN_Birthday
@besthitskayosai
Donetsk
#SG
STUNS
@Simeone
@GUTY14HAZ
Pedri
#ChiringuitoBarcelona
@Ryanair_ES
golpe
coña
@B24PT
@pascualruizar
@_el_minuto_93
@MiguelSerran
@Alfremartinezz
@Don_Iniestazo
#PesadillaParaíso8
@simeonegiovanni
@RedakDingo
LALISA
#MONEY
komplo
bakır
#sefaköy
#halkalı
madenleri
@muharrembayrak4
#perşembe
@nihatsirdar
#gaziosmanpaşa
#beşiktaş
#nişantaşı
#taksim
#mecidiyeköy
muayene
Mumcunun
Taliban
#bakırköy
#şişli
kurulmak
#FBvREN
@YourAnonNews
@pleuvoiro
@YourAnonRiots
@wond3rghost
#merter
#küçükçekmece
@dr_moosavi
@tanhayektiger
@haj_haydar
#zeytinburnu
#avcılar
@AnonNovidades
@nobody_fb
@SheIerHaghani
#bahçelievler
@MamadReza84
@hehsani71
@MemAR1983
Guardem
Oitavos
© Trendsmap.com, OSM.org

API

- Le **Application Program Interfaces** (APIs) sono protocolli – di solito pubblici - che definiscono le interazioni tra siti e i loro utenti
- Le APIs possono essere sfruttate da programmi simili ai browser, ma:
  - I browsers mostrano **(rendering)** il contenuto ottenuto dal sito
  - Le APIs servono per accedere in modo controllato ai **dati** del sito
  - Se le APIs sono pubbliche spesso il sito le fa usare solo agli utenti autorizzati e/o autenticati:
    - Twitter, Amazon, GoogleMaps, Facebook, Instagram, Github, etc.

Ottenere l’accesso alle API come developer

How to get access to the Twitter API

Step one: Apply and receive approval for a developer account

To make any request to the Twitter API, you must first apply for a developer account and have your use case approved.

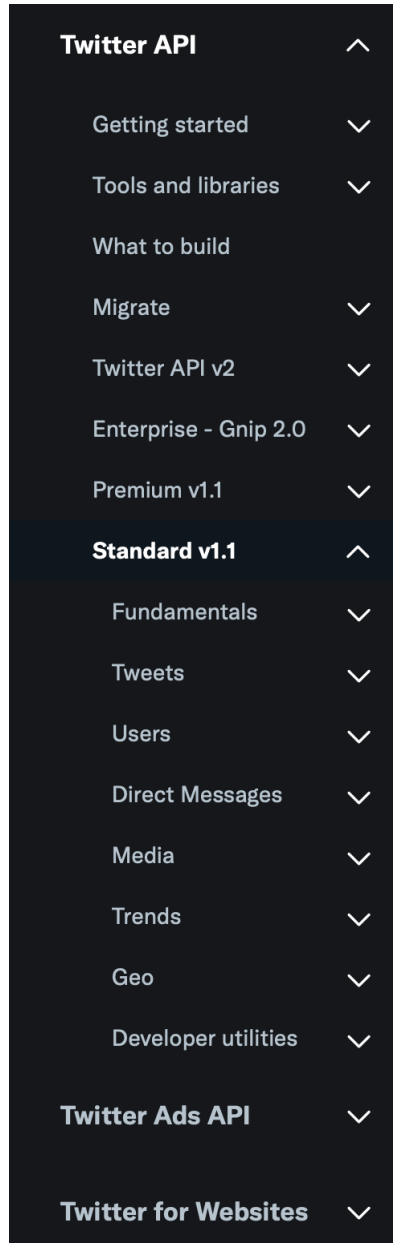
You can choose to apply for the Standard or Academic Research product tracks, which offer tailored support, access levels, and pricing.

- **Standard** - The default product track for most developers, including those building something for fun, for a good cause, to learn or teach. All approved developers will be able to create and use a Standard Project.
- **Academic Research** - This product track provides qualified academic researchers access to elevated access and enhanced functionality, including access to the full-archive search endpoint, a higher monthly Tweet cap, and enhanced filtering capabilities with the filtered stream and recent search endpoints.

Once approved, you can create a Standard or Academic Research Project and an associated developer App which will provide you a set of credentials that you will use to authenticate all requests to the API.

We require an approved use case to use the Twitter API to protect the people that use Twitter. Before you apply, we strongly encourage you to understand our developer policy, and to review our list of restricted use cases. If your use case does not adhere to our policy, we will reject your application.

https://developer.twitter.com/en/docs/twitter-api/getting-started/getting-access-to-the-twitter-api



Le API 1.1 di Twitter

Standard v1.1

What's included in standard v1.1?

Our free, standard APIs are great for getting started, testing an integration, validating a concept, or creating solutions that complement what you can create with premium and enterprise products. Examples include posting content to Twitter and retrieving similar data to what is on twitter.com and the Twitter mobile app.

https://developer.twitter.com/en/docs/twitter-api/v1

Tweets	Post, retrieve, and engage with Tweets
	Get Tweet timelines
	Curate a collection of Tweets
	Search Tweets: 7 day*
	Filter realtime Tweets
	Sample realtime Tweets
Users	Manage account settings and profile
	Mute, block, and report users
	Follow, search, and get users
	Create and manage lists
	User profile images and banners
Direct Messages	Sending and receiving events
	Welcome Messages
	Message attachments
	Quick Replies
	Buttons
	Typing indicator and read receipts
	Conversation management
	Custom profiles
	Customer feedback cards
Media	Upload media
Trends	Get trends near a location
	Get locations with trending topics
Geo	Get information about a place
	Get places near a location

Esempio di uso della API standard 1.1:

https://developer.twitter.com/en/docs/tutorials/customer-engagement-application-playbook

Twitter API v2

What is v2?

Twitter API v2 is the latest version of the Twitter API that can be used by all Twitter developers. Twitter Developer Platform originally launched Early Access to give developers a preview of the v2 API back in June 2020, and in November 2021 we launched a production ready, stable version of v2 for all developers.

The functionality available within Twitter API v2 serves the majority of developers on the platform. The Twitter API v2 is the latest version of the single platform that will eventually replace the current standard v1.1, premium v1.1, and enterprise APIs.

For more detail about our plans for the new Twitter API, visit our "Guide to the future".

How can I try the Twitter API v2 right now?

Twitter API tools includes the Twitter API Playground which helps you to test out several Twitter API v2 endpoints even before signing up for an account. Get started with a simple username lookup here, or search for recent Tweets with a simple keyword query here.

https://developer.twitter.com/en/support/twitter-api/v2

Sentiment analysis con Twitter

How to analyze the sentiment of your own Tweets

Tweets combined with a sentiment score can give you a gauge of your Tweets in a quantitative way. To put some data behind the question of how you are feeling, you can use Python, **Twitter's recent search endpoint** to explore your Tweets from the past seven days, and Microsoft Azure's **Text Analytics Cognitive Service** to detect languages and determine sentiment scores. This tutorial will walk you through how you can create code that pulls your Tweets from the past seven days and gives you a score to let you know exactly how your week has been. You can reference the **full version of the code** in the folder called v2.

Setting up

Before you can get started you will need to make sure you have the following:

- Python 3 **installed**.
- Twitter Developer account: if you don't have one already, you can **apply for one**.
- A **Project** and **App**, which can be created in your **Twitter developer account**.
- A **bearer token** for your App's enrollment. You can find your bearer token with the **keys and tokens of your App** provided in the developer portal.
- An account with Microsoft Azure's **Text Analytics Cognitive Service** and an endpoint created. You can check out Microsoft's **quick start guide on how to call the Text Analytics API**.

https://developer.twitter.com/en/docs/tutorials/how-to-analyze-the-sentiment-of-your-own-tweets

Giocare con Twitter (esempi)

- https://www.makeuseof.com/tag/10-real-time-twitter-games-enjoy-tweet/
- https://mashable.com/archive/twitter-games
- https://kotaku.com/you-can-now-play-doom-via-twitter-1847881209
- https://algogroup.unimore.it/people/manuela/Papers/TSentiment.pdf

Codice disponibile (Java)

- https://github.com/Zacomo/Tweet-Tracker
- Il progetto di tesi fu la realizzazione di un programma con le API di Twitter.
- Tale progetto ha come obiettivo quello di mostrare le potenzialità degli strumenti messi a disposizione da Twitter per la raccolta di dati dalla sua piattaforma.
- I tweet possono essere un mezzo tramite la quale è possibile ottenere informazioni da eventi di vario tipo; se geolocalizzati acquisiscono ulteriore importanza perché forniscono un riscontro degli avvenimenti da una posizione precisa.

Link utili

- https://developer.twitter.com/en/docs/tutorials/customer-engagement-application-playbook
- https://github.com/Zacomo/Tweet-Tracker
- https://www.tweetbinder.com/blog/twitter-advanced-search/
- https://github.com/twitterdev/Twitter-API-v2-sample-code
- https://mkearney.github.io/nicar_tworkshop/#1