

# SOCIAL MEDIA INFLUENCER ANALYZER - INFLUINSIGHTS



Dadopoulos Michail

# WHAT IS THE PROJECT ABOUT

InfluInsights is a social media influencer analyzer tool that uses the YouTube API to fetch data about influencers performance, including audience demographics and engagement metrics. The tool will offer insights and trends through visualizations and data analysis, and will allow users to sort and display the most popular influencers in a niche. Its goal is to help users make data-driven decisions in their influencer marketing campaigns.



## SELECTED TECHNOLOGIES

- Social Media API: Youtube API (
- Database: MongoDB Atlas Cloud database
- Software language: Python at Google Colab
- UI Design: Google Colab Forms and Jupyter Widgets

# You Tube

Data API v3



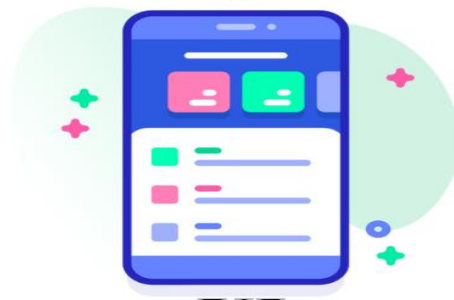
  
mongoDB  
Atlas

+

  
python

+

colab



UI

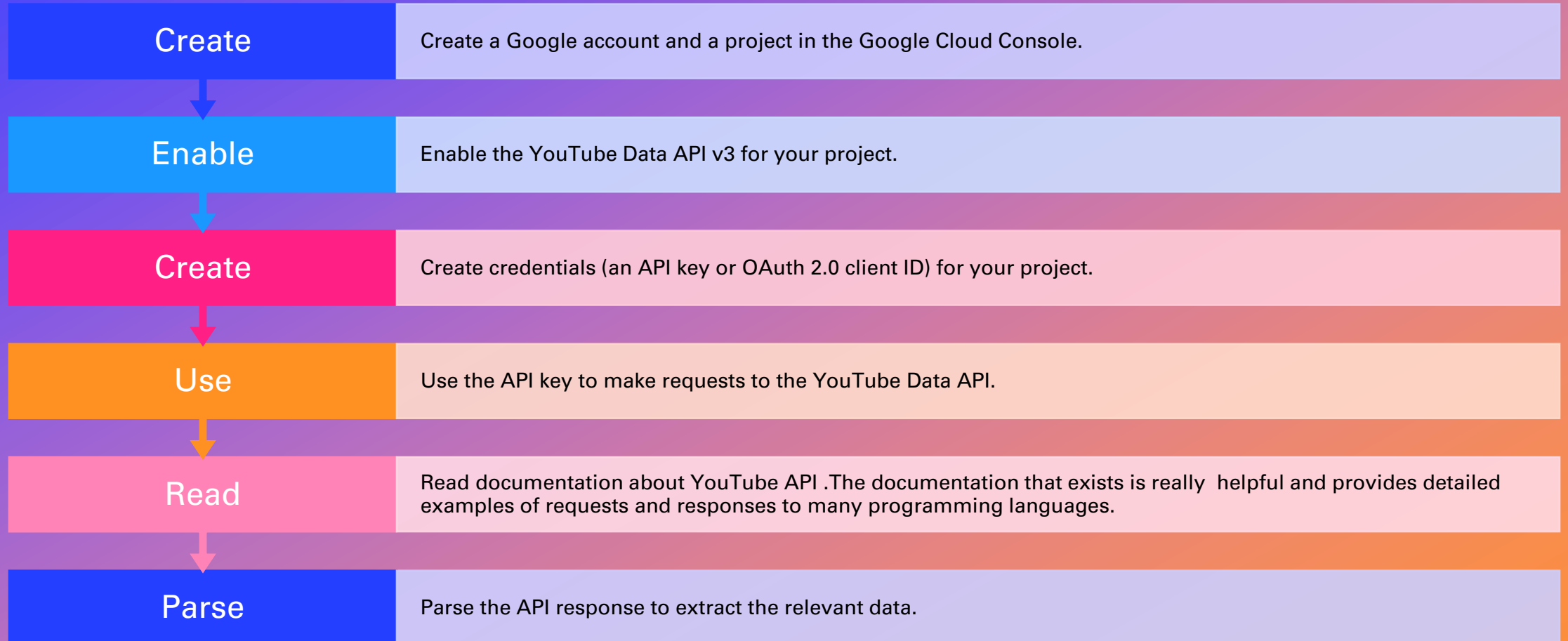
# YOUTUBE API



The YouTube API provides developers with programmatic access to YouTube features and data, allowing them to create applications that can interact with the YouTube platform. Some of the features and data that the YouTube API provides access to include:

Videos, channels, playlists, comments, ratings, subscriptions, search.

# STEPS TO USE YOUTUBE API



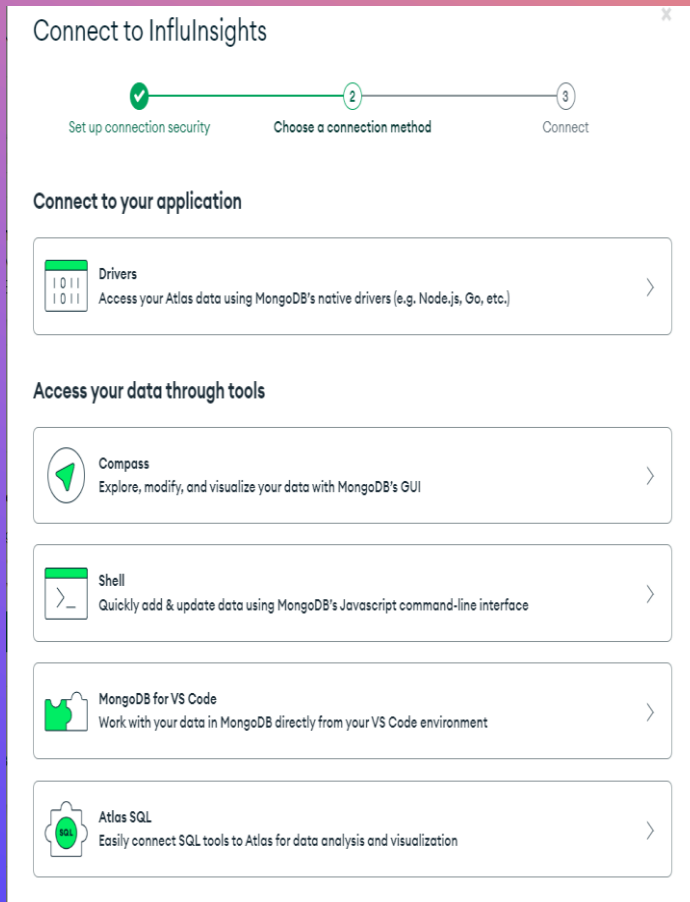
# MONGODB ATLAS & MONGODB COMPASS



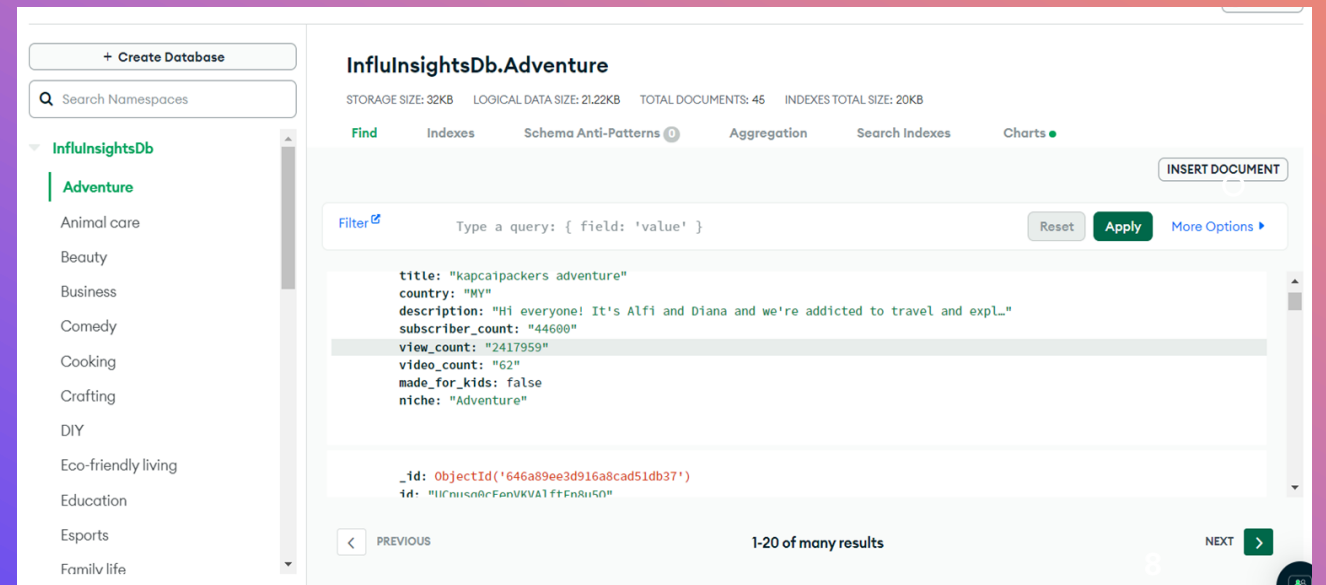
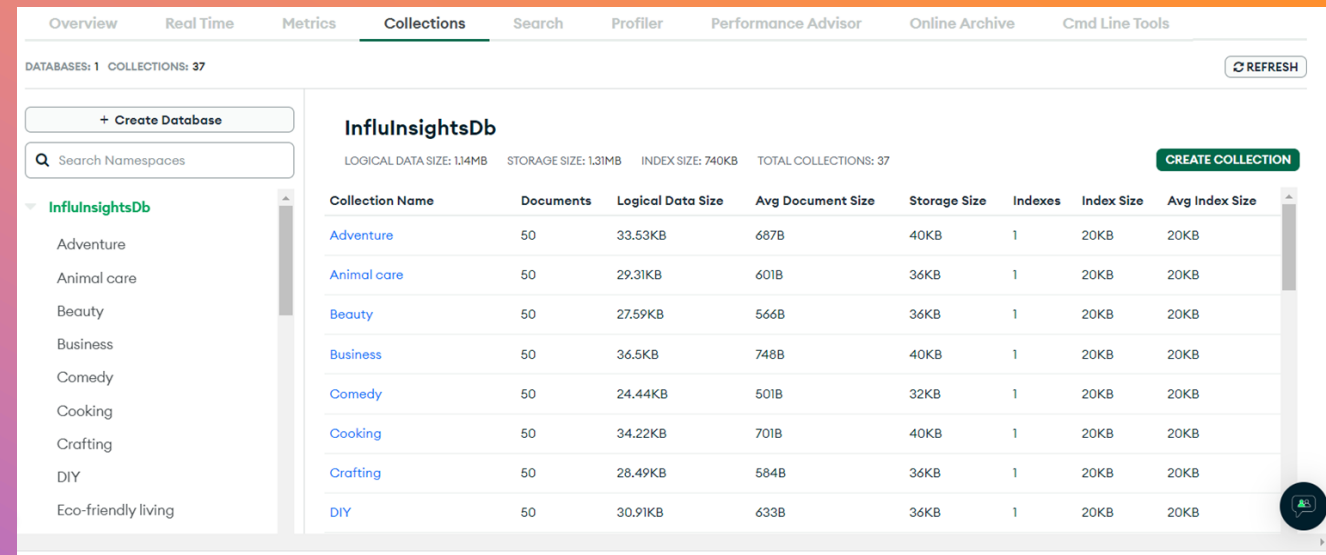
MongoDB Atlas is a fully-managed multi-cloud database service by the same people that build MongoDB. Atlas simplifies deploying and managing your databases while offering the versatility you need to build resilient and performant global applications on the cloud providers of your choice(AWS, Azure, and GCP ).

MongoDB Compass is a graphical user interface tool for MongoDB, which allows users to visually explore and interact with their MongoDB data. It provides an intuitive and user-friendly interface for working with MongoDB databases and collections, and includes features such as schema analysis, document validation, and real-time performance metrics.





- You can connect to your cloud Database and gain access data your data with many different tools such as MongoDB,command shell,etc.
- MongoDB Atlas also provides many tools such as visualization of your data,metrics, implementation of trigger events for your database,etc.







# DESIGNING UI WITH GOOGLE COLAB

It is possible to create simple UI designs (for example basic forms) with Google colab.

The screenshot displays a Google Colab notebook titled "InfluInsights UI". It contains two distinct user interface forms. The first form, titled "Choose a Niche or write one to see YouTube influencers", features a dropdown menu with "Comedy" selected, a slider for "Number\_of\_results" set to 18, a "Show code" link, and a "Show Results" button. The second form, titled "Search YouTube channel", includes a text input field with the placeholder "Insert text here", a "Show code" link, and another "Show Results" button. The notebook interface includes standard toolbar icons at the top right.

## InfluInsights UI

```
• #@title &emsp;&emsp;InfluInsights UI {run:"auto"}
#@markdown Choose a Niche or write one to see YouTube influencers
Niche = "Karate" #@param ["Adventure", "Animal care", "Beauty", "Business", "Comedy", "C

#@markdown Select how many channels you want to see for you search
Number_of_results = 24 #@param {type:"slider", min:0, max:50, step:1}

#Show Results: False #@param {type:"boolean"}
```

Choose a Niche or write one to see YouTube influencers

Niche: Karate

Select how many channels you want to see for you search

Number\_of\_results:  24

- The #@title sets the title of the form and with the option {run:'auto'} our code is executed every time we change the parameters of the form.
- We can have simple text with #@markdown
- To create a variable for our python code we write its name and an initial value and we comment #@param and we then define the type of it in the UI
- To create a dropdown menu we just define a list of items we want to have as options.If we have add in the end of the comment {allow-input: true},this allows us to write new inputs that are not in the dropdown menu.
- To create a slider we choose {type:"slider",min:startValue,max:endValue,step:stepValue}
- We can also create a simple input form with {type:"string"} in order for the user to add a string input.It can also be of type date,Boolean,integer,number and raw ,which is in the form of code inside the variable.

It is possible also to edit the forms manually and without writing code by clicking to the pencil icon next to each form field

### Edit form field

Form field type

dropdown

Variable name

Niche

Variable type

string

☒ Allow input

#### Dropdown options

+ Item

Adventure

Animal care

Beauty

Business

Comedy

Cooking

Delete

Cancel

Save

# INFLUINSIGHTS STEP BY STEP

Fetches Channels data with Youtube API about several niches. (around 37)

Selects the data with the required information from the data returned.

Connects to and stores this data in MondoDB Atlas.

Creates simple UI at Google Colab and use a Jupyter widget button to show the results when is pressed.

Searches Channels Information about several Niches in a dropdown menu or providing the option to search for a new one. Provides the option to select the number of results shown (0-50)

Depending on the inputs in the UI forms, when the button is pressed the app restores data from the database or fetch data from YouTube about the new input niche at real time and shows the results.

The app provides the option to search a YouTube channel by its name and see its information about it. It request and fetch the data from YouTube at the same time and shows it.

# SELECTING ONE EXISTING NICHE

Designing UI with Google Colab

InfluInsights UI

Choose a Niche or write one to see YouTube influencers

Niche:

Select how many channels you want to see for you search

Number\_of\_results:

[Show code](#)

Show Results

SELECTED NICHE: Comedy

Channel: 1

Name: Dry Bar Comedy

Associated Country: United States

DESCRIPTION OF THE CHANNEL:

Funny for Everyone. Stand up comedy for everyone in the family.

The channel has 2532 videos, 2330000 subscribers and 812985159 views.

The channels is not suitable for kids

Channel: 2

Name: Comedy Central

Associated Country: United States

DESCRIPTION OF THE CHANNEL:

Finally, comedy on YouTube. It's everything you love about Comedy Central: comedians, jokes, roasts and beyond. Check out classic sketches from Key & Peele and Chappelle's Show and the latest from Awkwafina and Tosh.0. Get a tipsy view of the past from Drunk History and the latest jokes and sketches from up and coming comedians.

The channel has 6191 videos, 11400000 subscribers and 6574208765 views.

The channels is not suitable for kids

# SEARCHING FOR A NEW NICHE +

Choose a Niche or write one to see YouTube influencers

Niche: Karate

Select how many channels you want to see for you search

Number\_of\_results:

[Show code](#)

Channel: 2

Name: KA KỶ KỤC

Associated Country: Viet Nam

DESCRIPTION OF THE CHANNEL:

Hế lô mọi người. KA nè.

Đây là kênh youtube của KA, KA sẽ làm những video về game, livestream game cũng như cùng mọi người trải nghiệm những con game hấp dẫn, mong là chúng ta sẽ có những giây phút giải trí cùng nhau, hãy để KA tạo tiếng cười cho mọi người nhé. Yêu mọi người vãi ò.

Groub Fan KA: <https://www.facebook.com/groups/langkykuc>

Facebook cá nhân: <https://www.facebook.com/kakykuc98>

Email: [quoclapka@gmail.com](mailto:quoclapka@gmail.com)

Cám ơn tất cả mọi người đã ủng hộ cho KA nè.

The channel has 198 videos, 10600 subscribers and 2027991 views.

The channels is not suitable for kids

Channel: 3

Name: brownsvilleka

DESCRIPTION OF THE CHANNEL:

I've been rhyming for over 20 years and appreciate any hip hop fan who respects lyrics. I already know my songs are not for everyone. They're not for the radio, the club or the masses. My music is for those who miss early '90s hip hop when pain and struggle were the dominant themes. From my days with Natural Elements, then Nightbreed, I've always tried to remain true to what I believe is the real spirit of hip hop. If you're going to rhyme, you should have something relevant and unique to say. I decided a long time ago that I would make music for the love of it. If you can make money from art, that's a beautiful thing. But money shouldn't be the reason you make art. You make art because you can't help it. I can honestly say there's not a day that goes by that lines don't come to me. My words are an extension of who I am and I was never willing to compromise that for anyone.

The channel has 59 videos, 22000 subscribers and 4798807 views.

The channels is not suitable for kids

# SEARCHING ONE CHANNEL BY ITS NAME.

Search YouTube channel



Channel\_name: "MrBeast"

[Show code](#)

Show Results

Searched for : MrBeast

Channel: 1

Name: MrBeast

Associated Country: United States

DESCRIPTION OF THE CHANNEL:

SUBSCRIBE FOR A COOKIE!

Accomplishments

- Raised \$20,000,000 To Plant 20,000,000 Trees
- Given millions to charity
- Donated over 100 cars lol
- Gave away a private island
- Given away over 100 ps4s lol
- Gave away 1 million dollars in one video
- Counted to 100k
- Read the Dictionary
- Watched Dance Till You're Dead For 10 Hours
- Read Bee Movie Script
- Read Longest English Word
- Watched Paint Dry
- Ubering Across America
- Watched It's Every Day Bro For 10 Hours
- Ran a marathon in the world's largest shoes
- Adopted every dog in a shelter

You get the point haha

\*Do not email me asking for money, I give away money because it makes me happy :)

The channel has 737 videos, 154000000 subscribers and 26118653721 views.

The channels is not suitable for kids

# PROBLEMS FACED



YouTube API has a request limit of 1000/day.

Solution:

We just created more Projects in the Google Cloud Console and created new credentials (keys) to use in our requests.



+

•

○

# REFERENCES:

[Data | Cloud: MongoDB Cloud](#)

[Channels: list | YouTube Data API | Google Developers](#)

[Sample API Requests | YouTube Data API | Google Developers](#)

[Credentials – APIs and services – InfluencerAnalyzer – Google Cloud console](#)

[https://www.w3schools.com/python/python\\_mongodb\\_limit.asp](https://www.w3schools.com/python/python_mongodb_limit.asp)

# THANK YOU!

