Twelve Labs Embedded API

# AI-POWERED CHATBOT

# INFINITE JEST

Gateway to an endless world of movie and TV show insights, where every question unlocks a universe of cinematic knowledge.

Twelve Labs Embedded API

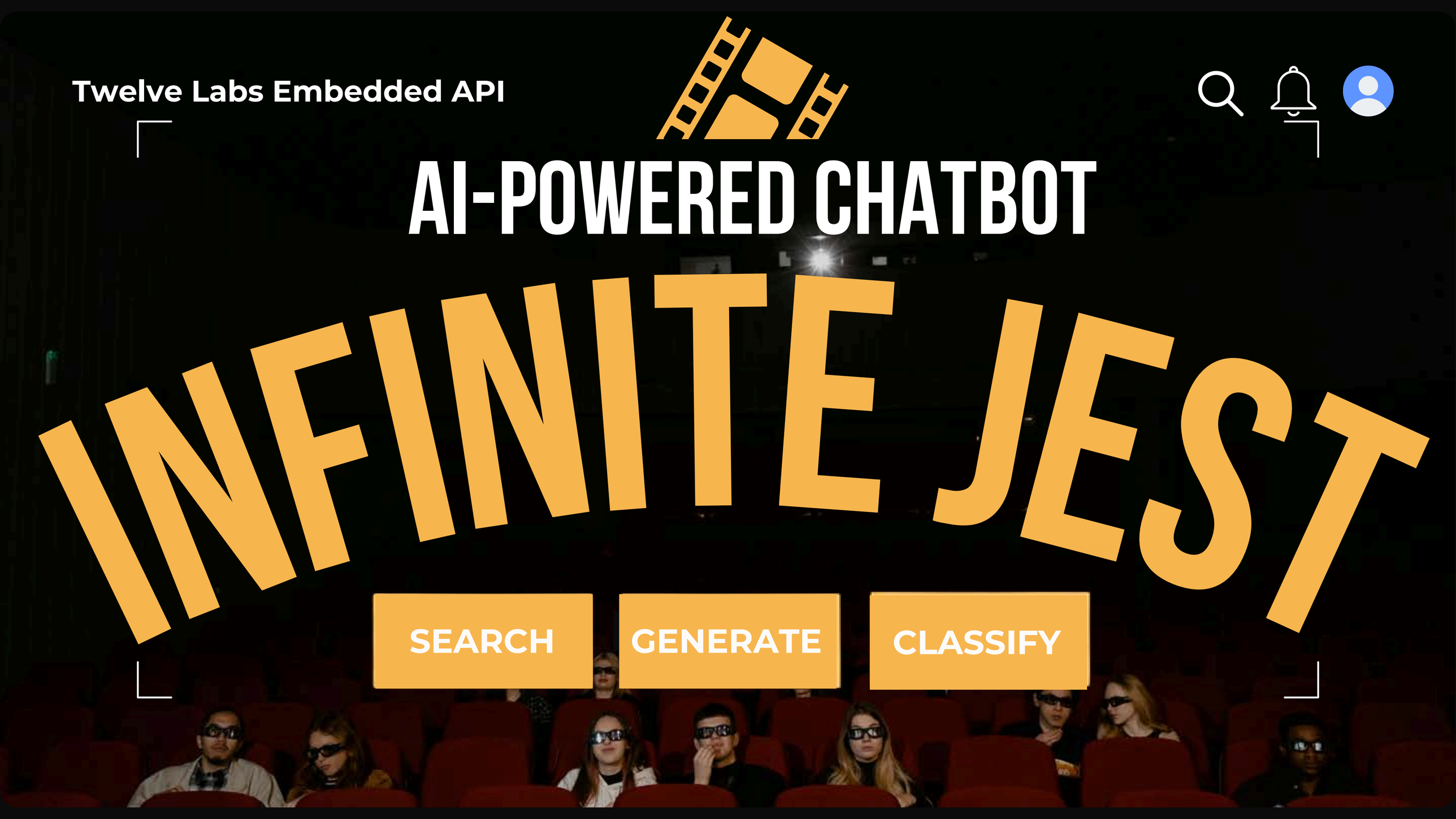
# AI-POWERED CHATBOT

# INFINITE JEST

SEARCH

GENERATE

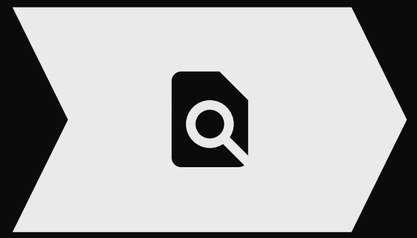
CLASSIFY



## 1. Ingest Video Content:

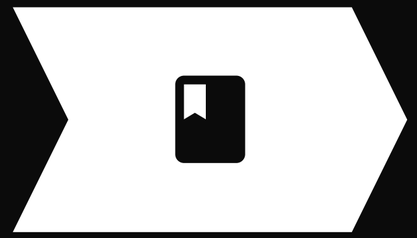
Use the Twelve Labs Embed API to convert a selected library of 15-20 movie and TV show trailers, including popular titles like "Deadpool & Wolverine," into high-quality video embeddings. This process involves analyzing each trailer's visual, audio, and textual elements to create detailed vector representations.

## 2. Store Embeddings:



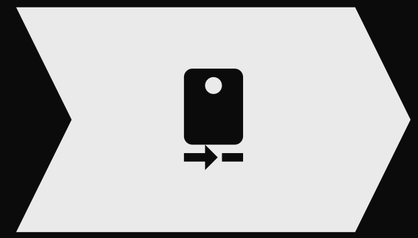
Store the generated video embeddings in a high-performance vector database, such as Pinecone or Milvus, to enable fast and efficient retrieval of relevant data when processing user queries.

## 3. Develop User Interface:



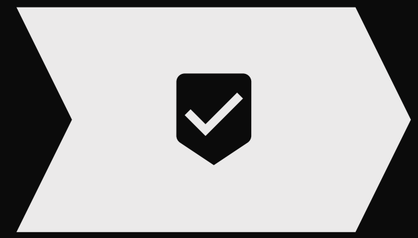
Design and implement a user-friendly interface using Streamlit that allows users to interact with the chatbot. This interface should support intuitive navigation and enable users to input specific questions about the trailers, such as "What is Wolverine's role in the Deadpool trailer?"

## 4. Implement RAG Retrieval:



Integrate Retrieval-Augmented Generation (RAG) into the system. This involves using the vector database to retrieve the most relevant video embeddings based on the user's question and then passing these embeddings to the language model to generate contextually accurate answers.

## 5. Generate Responses:



Utilize a sophisticated language model to generate precise and informative responses. The model incorporates the context from the retrieved video embeddings to provide detailed answers to user questions. For example, it can describe specific action scenes or character roles in trailers like "Deadpool & Wolverine."

INFINITE JEST

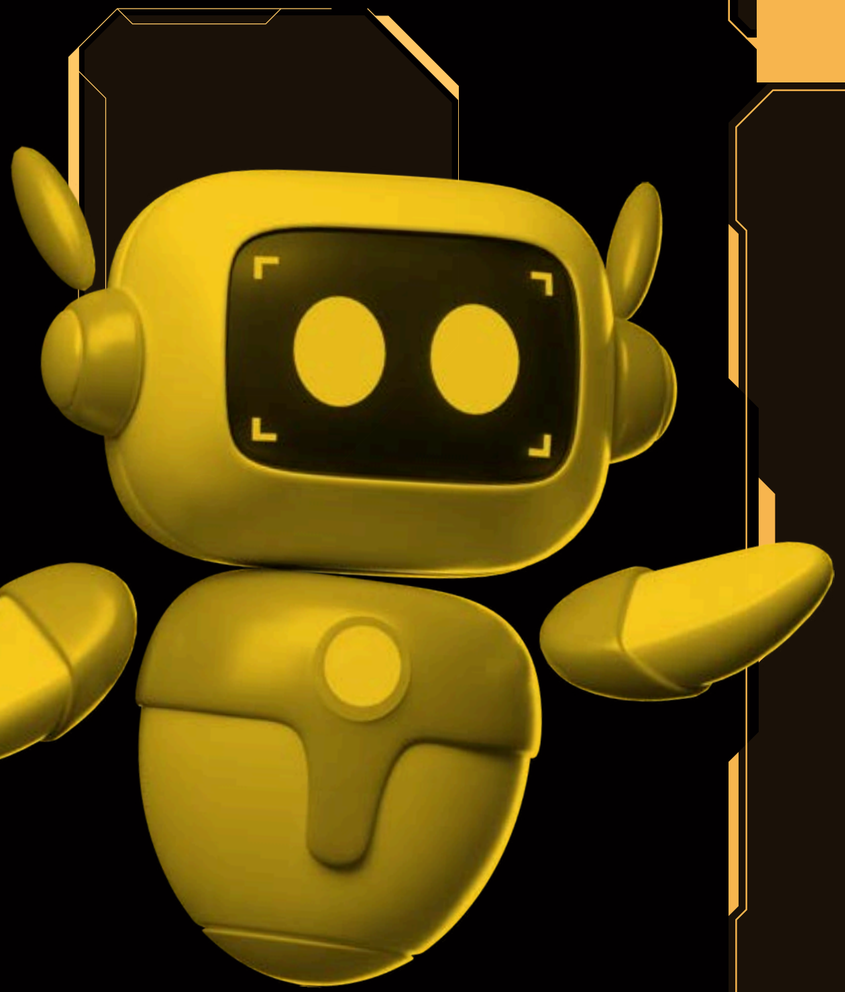
# Twelve Labs Embed API to convert movie video trailers

SEARCH

GENERATE

CLASSIFY

INFINITE JEST



## SEARCH

User Query: "Show me Deadpool's first appearance in the trailer."

Response: The system retrieves the clip where Deadpool first appears on screen.

## GENERATE

User Prompt: "Generate a summary of the Deadpool & Wolverine trailer."

Response: "The trailer introduces Deadpool and Wolverine, highlighting their conflict and humorous interactions. The action-packed scenes are interspersed with witty banter and dramatic moments."

## CLASSIFY

Classify all of your content in seconds

Categories:
Action: Classify scenes with high-intensity action, such as fights or explosions.

INFINITE JEST

# How does it work?

## SEARCH

**User Query: "Show me Deadpool's first appearance in the trailer."**

Find any scene in natural language

- User Query: "Show me Deadpool's first appearance in the trailer."
  - Response: The system retrieves the clip where Deadpool first appears on screen.
- User Query: "Find the scene where Deadpool fights Wolverine."
  - Response: The system retrieves the specific moments in the trailer where Deadpool and Wolverine are engaged in a fight.

# Search

Choose index

Infinite Jest

Select search options

- [x] Visual
- [x] Conversation
- [x] Text in video
- [x] Logo

Advanced parameters

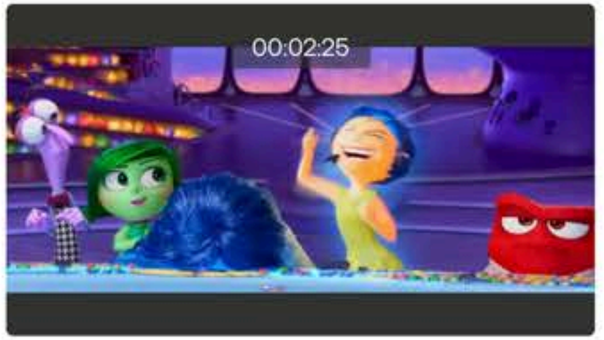
Find any scene with action sequences from the movie "Transformers One."

**Videos in Infinite Jest**

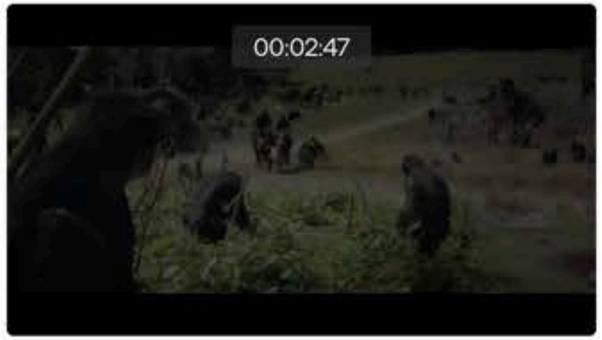
20 videos (Total 51m 50s) • Index created on Jun 09, 2024

Sort by : Recent upload

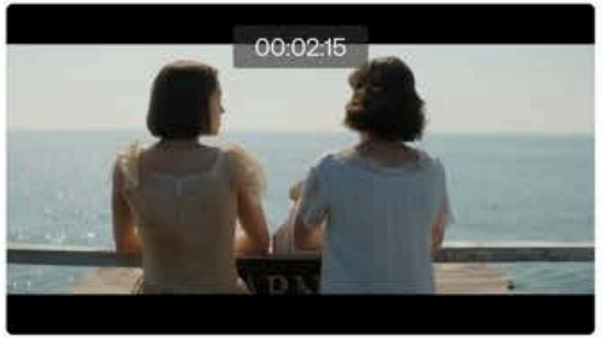
FURIOSA : A MAD MAX SAGA | OFFICIAL TRAILER...

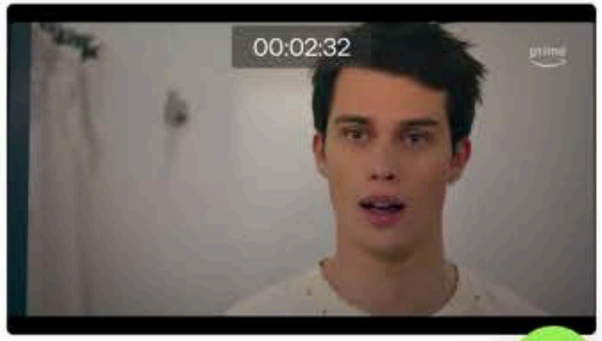


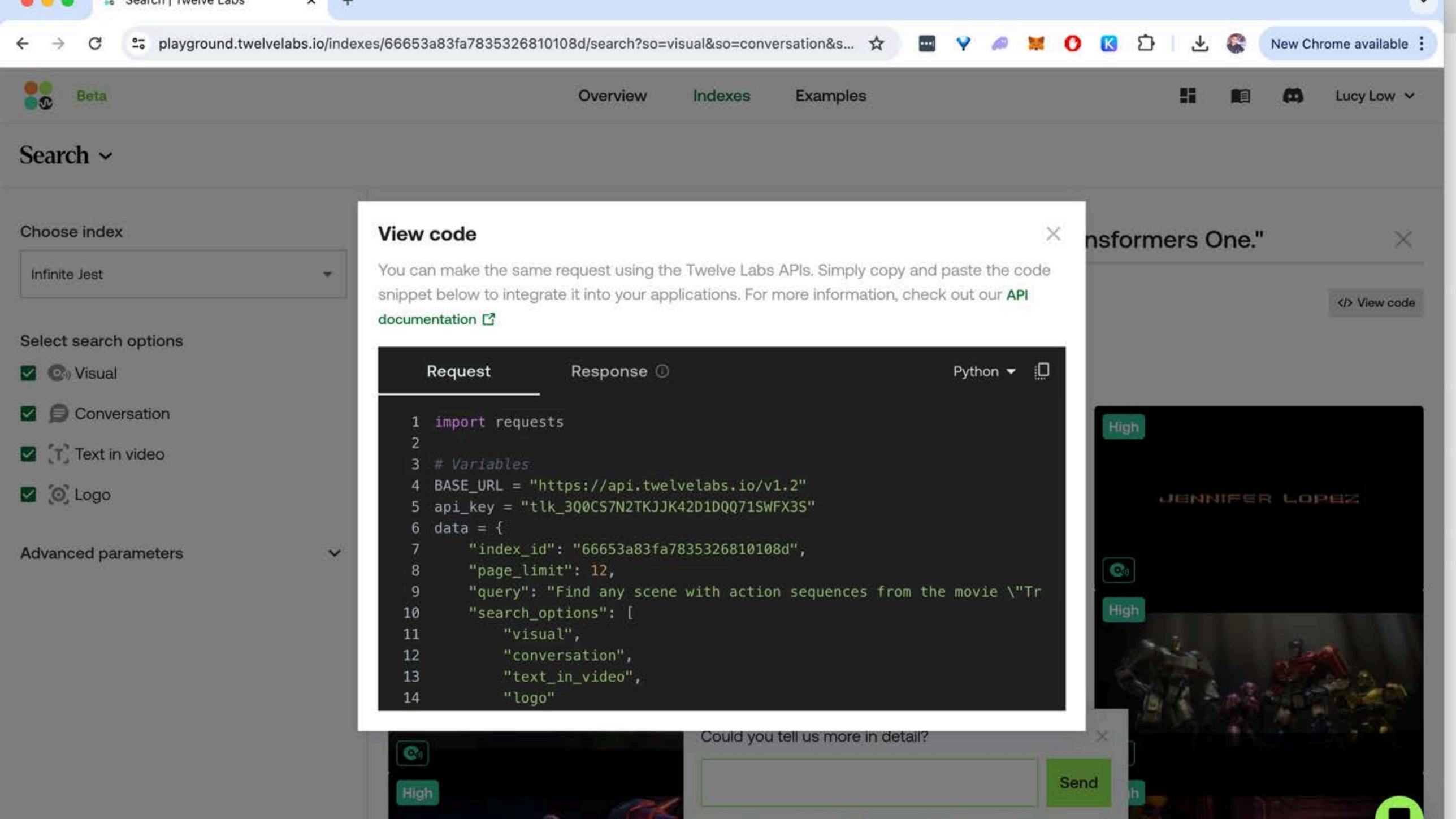

Inside Out 2 | Official Trailer




Kingdom of the Planet of the Apes | Final Trailer




playground.twelvelabs.io/indexes/66653a83fa7835326810108d/search?so=visual&so=conversation&s...
New Chrome available
Beta
Overview
Indexes
Examples
Lucy Low
Search
Choose index
Infinite Jest
Select search options
Visual
Conversation
Text in video
Logo
Advanced parameters
View code
You can make the same request using the Twelve Labs APIs. Simply copy and paste the code snippet below to integrate it into your applications. For more information, check out our API documentation
Request
Response
Python
1 import requests
2
3 # Variables
4 BASE_URL = "https://api.twelvelabs.io/v1.2"
5 api_key = "tlk_3Q0CS7N2TKJJK42D1DQQ71SWFX3S"
6 data = {
7 "index_id": "66653a83fa7835326810108d",
8 "page_limit": 12,
9 "query": "Find any scene with action sequences from the movie \"Tr
10 "search_options": [
11 "visual",
12 "conversation",
13 "text_in_video",
14 "logo"
High
JENNIFER LOPEZ
Could you tell us more in detail?
Send

INFINITE JEST

# How does it work?

## GENERATE

Generate any text about your video through prompting

- Generate Summary:
  - User Prompt: "Generate a summary of the Deadpool & Wolverine trailer."
  - Response: "The trailer introduces Deadpool and Wolverine, highlighting their conflict and humorous interactions. The action-packed scenes are interspersed with witty banter and dramatic moments."
- Generate Highlights:
  - User Prompt: "Create highlights for the Deadpool & Wolverine trailer."
  - Response: "1. Deadpool's first appearance. 2. Wolverine's dramatic entrance. 3. The epic fight between Deadpool and Wolverine. 4. Deadpool's witty remark about Wolverine's claws."

# Generate

**Select a video**

Inside Out 2 | Official Trailer

Templates | Build my own

**Select output**

Summary | Highlights | Chapters

**Advanced parameters**

Temperature 0.7

0.01 — 0.7 — 1

Output instructions (Optional)

Summary

Provide a detailed report on the characters and plot of “Inside Out 2”

Highlights

e.g. Tell me the highlights of this video in a dramatic tone of voice

Generate

Back

View code

Below is AI generated content

## Rio 2”: A Vibrant Adventure of Friendship and Emotions with Joy, Sadness, and More.

Inside Out 2 | Official Trailer

### Topic

Animated Adventure with Emotional Characters from Rio 2

### Hashtags

#animated adventure #emotions #friendship #celebration #humor #per

#character interaction

### Summary

In the imaginative sequel "Inside Out 2," the narrative delves deeper into the complex emotional landscape of Riley, who is now navigating the challenges of growing up. The film introduces a vibrant array of emotions that

playground.twelvelabs.io/indexes/66653a83fa7835326810108d/generate?v=66653f33d22b3a3c97bf1ce1

New Chrome available

Beta

Overview Indexes Examples

Lucy Low

# Generate

**Select a video**

Inside Out 2 | Official Trailer

Templates | Build my own

**Select output**

Summary | Highlights | Chapters

**Advanced parameters**

Temperature 0.7

0.01 — 0.7 — 1

Output instructions (Optional)

Summary

Provide a detailed report on the characters and plot of “Inside Out 2”

Highlights

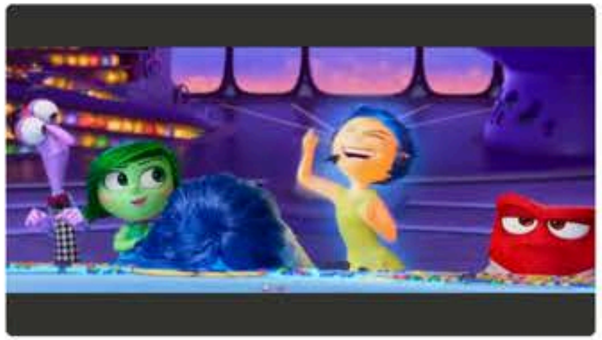
e.g. Tell me the highlights of this video in a dramatic tone of voice

Generate

**Videos in Infinite Jest**

20 videos (Total 51m 50s) • Index created on Jun 09, 2024

Sort by : Recent upload



Inside Out 2 | Official Trailer

1

# Generate

**Choose index**

Infinite Jest

**Select a video**

Please select a video

Templates | Build my own

**Select output**

Summary | Highlights | Chapters

**Advanced parameters**

Temperature 0.7

0.01 — 0.7 — 1

Output instructions (Optional)

Summary

e.g. Create a summary of this video as if you are writing a movie review in a magazine

Generate

## Videos in Infinite Jest

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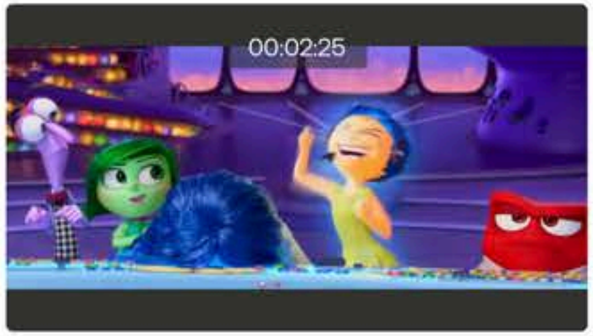
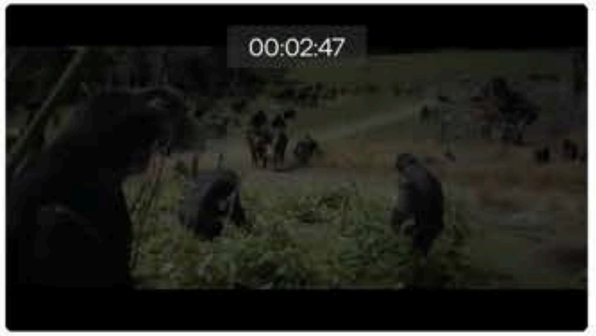
FURIOSA : A MAD MAX SAGA | OFFICIAL TRAILE...

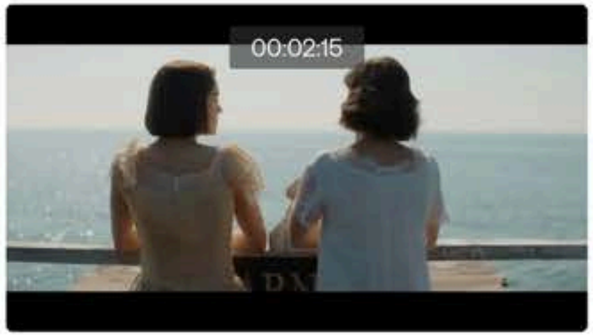



Inside Out 2 | Official Trailer

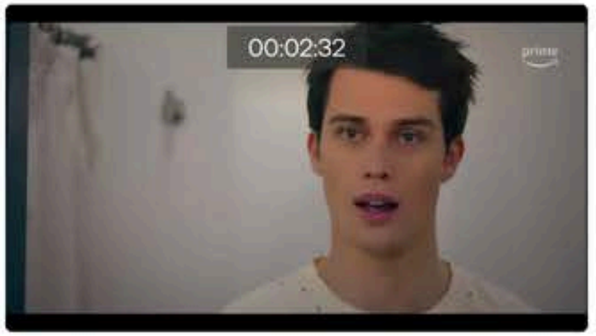



Kingdom of the Planet of the Apes | Final Trailer

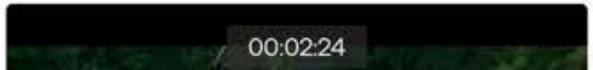
Transformers One _ Official Trailer (2024) - Chris...

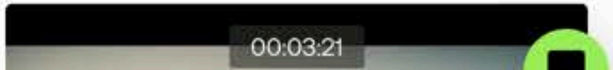



Young Woman and the Sea _ Official Trailer.mp4




The Idea of You - Official Trailer _ Prime Video.m...



# Generate

**Select a video**

Inside Out 2 | Official Trailer

Templates | Build my own

**Select output**

Summary | Highlights | Chapters

**Advanced parameters**

Temperature 0.7

0.01 — 0.7 — 1

Output instructions (Optional)

Summary

Provide a detailed report on the characters and plot of “Inside Out 2”

Highlights

e.g. Tell me the highlights of this video in a dramatic tone of voice

Generate

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### Topic

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### Hashtags

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### Summary

In the imaginative sequel "Inside Out 2," the narrative delves deeper into the complex emotional landscape of Riley, who is now navigating the challenges of growing up. The film introduces a vibrant array of emotions that

# Generate

**Select a video**

Inside Out 2 | Official Trailer

**Templates** Build my own

**Select output**

Summary Highlights Chapters

**Advanced parameters**

Temperature 0.7

0.01 0.7 1

Output instructions (Optional)

Summary

Provide a detailed report on the characters and plot of “Inside Out 2”

Highlights

e.g. Tell me the highlights of this video in a dramatic tone of voice

Generate

## Summary

In the imaginative sequel "Inside Out 2," the narrative delves deeper into the complex emotional landscape of Riley, who is now navigating the challenges of growing up. The film introduces a vibrant array of emotions that reside within Riley's mind, showcasing a broader spectrum of feelings that contribute to her psychological development. The main characters—Joy, Sadness, Anger, Fear, and Disgust—are joined by new emotions, including Anxiety, Envy, and Embarrassment, each bringing their unique perspective to the evolving emotional dynamics.

The plot thickens as the original emotions face the daunting task of integrating these new feelings into the Headquarters. The introduction of Anxiety is met with a mix of curiosity and concern, reflecting the typical apprehension associated with new experiences. Envy, with its keen observations and sharp remarks, brings a new dimension to the emotional interplay, highlighting the complexities of social interactions and self-perception. Embarrassment adds a relatable and poignant layer, representing the acute self-awareness and sensitivity that come with adolescence.

As Riley prepares for a significant transition, the emotions grapple with their roles and the introduction of sophisticated emotions required to navigate the complexities of high school life. The concept of suppressed emotions is explored, shedding light on the internal struggles that accompany pers

The narrative cleverly addresses the importance of embracing change, the value of

inevitability of leaving certain aspects of childhood behind.

"Inside Out 2" masterfully weaves humor, adventure, and heartfelt moments to portr

of human emotions. The interactions among the emotions, both old and new, provic

on the psychological processes involved in growing up. The film not only entertains

audiences a deeper understanding of emotional intelligence and psychological resil

The sequel's vibrant animation and dynamic character design further enrich the sto

workings of Riley's mind to life with creativity and flair. The emotional journey of Riley

as a compelling narrative that resonates with viewers of all ages, making "Inside Out 2" a worthy successor to

playground.twelvelabs.io/indexes/66653a83fa7835326810108d/generate?v=66653f33d22b3a3c97bf1ce...

New Chrome available

Beta

Overview Indexes Examples

Lucy Low

# Generate

Select a video

Inside Out 2 | Official Trailer

Templates Build my own

Create chapter titles for the various segments of "Inside Out 2 " trailer.

Advanced parameters

Temperature 0.7

0.01 0.7 1

Generate

</> View code

## View code

You can make the same request using the Twelve Labs APIs. Simply copy and paste the code snippet below to integrate it into your applications. For more information, check out our API documentation

Request Response Python

```python
import requests

# Variables
BASE_URL = "https://api.twelvelabs.io/v1.2"
api_key = "tlk_3Q0CS7N2TKJJK42D1DQQ71SWFX3S"
data = {
    "prompt": "Create chapter titles for the various segments of \"Ins
    "video_id": "66653f33d22b3a3c97bf1ce1"
}

# Send request
response = requests.post(f"{BASE_URL}/generate", json=data, headers={"
```

apter titles reflect the
he titles are:
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nexpected turn in the
mplexity to the
uggle to navigate

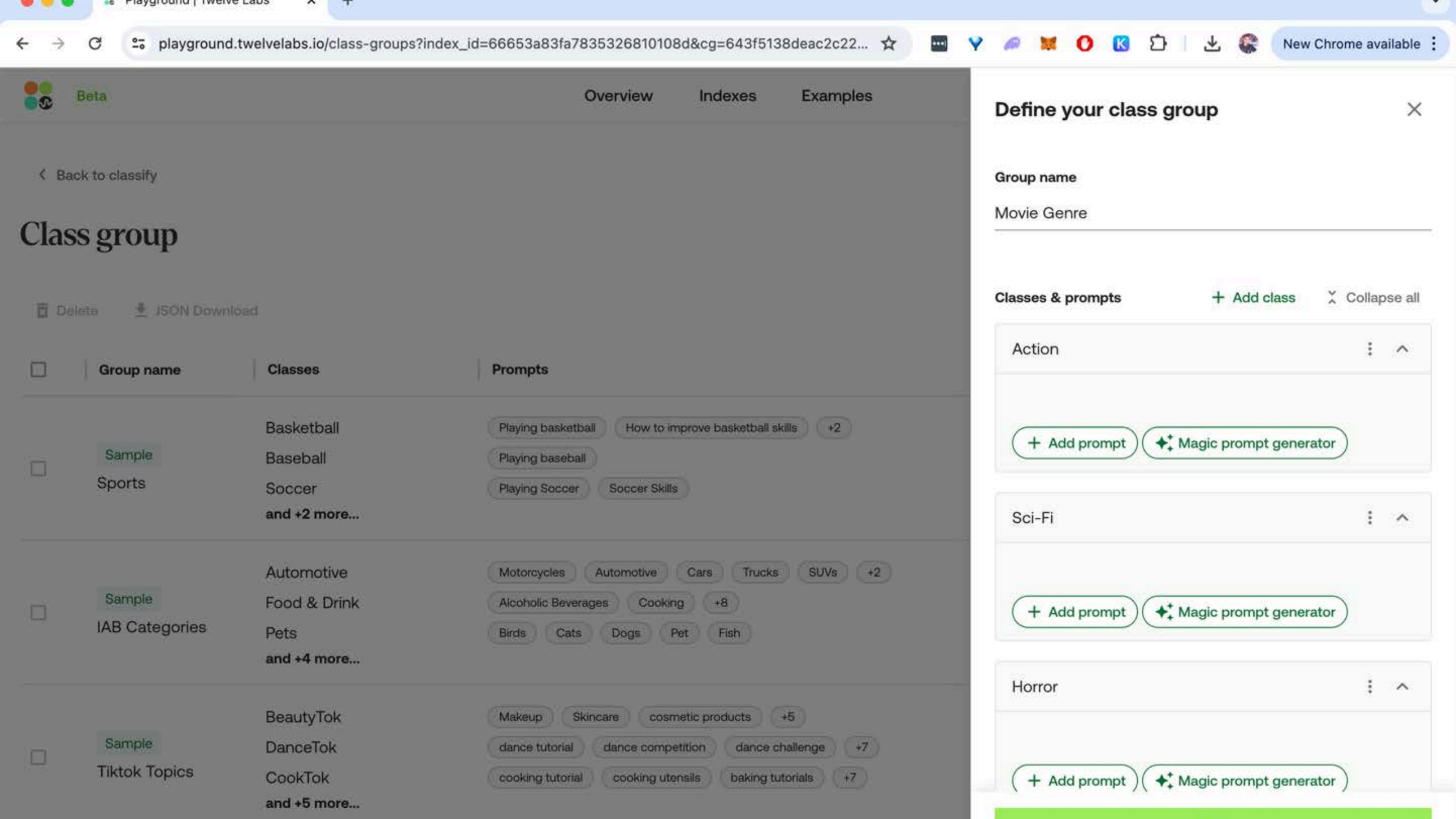
INFINITE JEST

# How does it work?

## CLASSIFY

Classify all of your content in seconds

- Categories:
  - Action: Classify scenes with high-intensity action, such as fights or explosions.
  - Comedy: Classify humorous scenes, especially those with Deadpool's jokes and witty remarks.
  - Drama: Classify dramatic moments, such as emotional dialogues or intense standoffs.
- Action:
  - Scene: Deadpool and Wolverine's fight scene.
  - Classification: This scene is tagged under the "Action" category.
- Comedy:
  - Scene: Deadpool making a witty remark about Wolverine's claws.
  - Classification: This scene is tagged under the "Comedy" category.
- Drama:
  - Scene: Wolverine's dramatic entrance.
  - Classification: This scene is tagged under the "Drama" category.


Playground | Twelve Labs
playground.twelvelabs.io/class-groups?index_id=66653a83fa7835326810108d&cg=643f5138deac2c22...
New Chrome available
Beta
Overview
Indexes
Examples
Back to classify
Class group
Delete
JSON Download
Group name
Classes
Prompts
Sample
Sports
Basketball
Baseball
Soccer
and +2 more...
Playing basketball
How to improve basketball skills
+2
Playing baseball
Playing Soccer
Soccer Skills
Sample
IAB Categories
Automotive
Food & Drink
Pets
and +4 more...
Motorcycles
Automotive
Cars
Trucks
SUVs
+2
Alcoholic Beverages
Cooking
+8
Birds
Cats
Dogs
Pet
Fish
Sample
Tiktok Topics
BeautyTok
DanceTok
CookTok
and +5 more...
Makeup
Skincare
cosmetic products
+5
dance tutorial
dance competition
dance challenge
+7
cooking tutorial
cooking utensils
baking tutorials
+7
Define your class group
Group name
Movie Genre
Classes & prompts
Add class
Collapse all
Action
Add prompt
Magic prompt generator
Sci-Fi
Add prompt
Magic prompt generator
Horror
Add prompt
Magic prompt generator

# Classify

Choose index

Infinite Jest

Select class group Edit

Movie Genre

Filter by class

Action Sci-Fi Horror +7

Advanced parameters

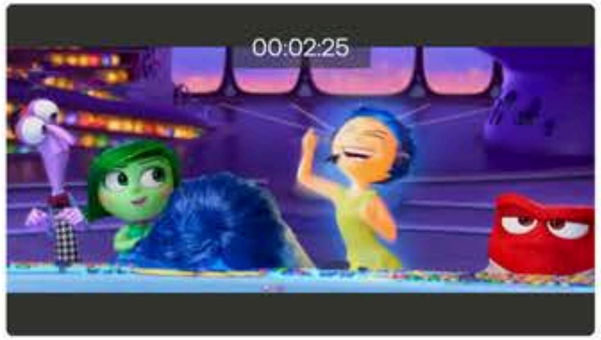
Run

## Videos in Infinite Jest

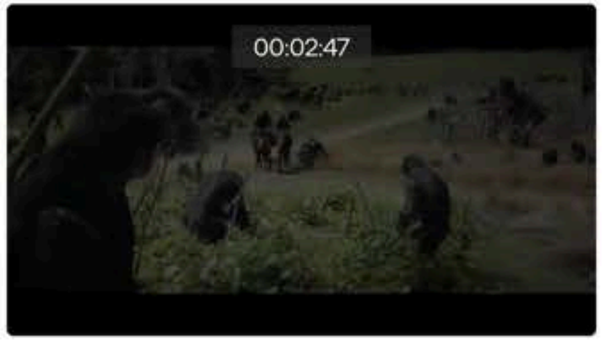
20 videos (Total 51m 50s) • Index created on Jun 09, 2024

Sort by : Recent upload

FURIOSA : A MAD MAX SAGA | OFFICIAL TRAILER...

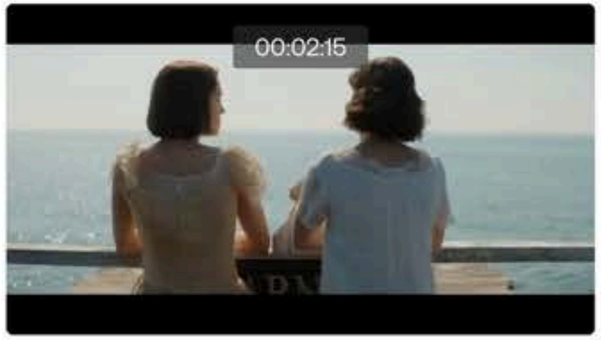



Inside Out 2 | Official Trailer

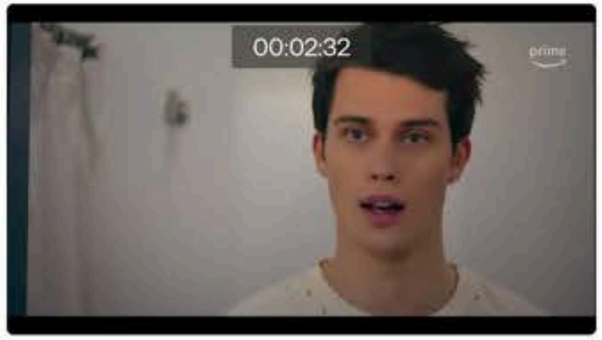



Kingdom of the Planet of the Apes | Final Trailer

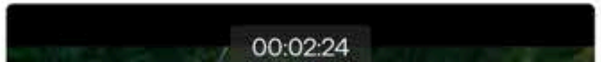
Transformers One _ Official Trailer (2024) - Chris ...




Young Woman and the Sea _ Official Trailer.mp4




The Idea of You - Official Trailer _ Prime Video.m...



# Classify

Choose index

Infinite Jest

Select class group

Edit

Run

## Videos in Infinite Jest

20 videos (Total 51m 50s) • Index created on Jun 09, 2024

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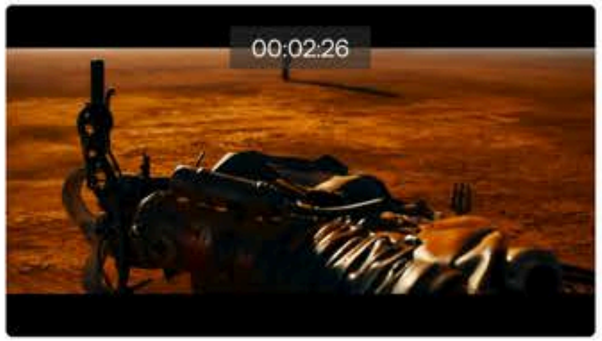
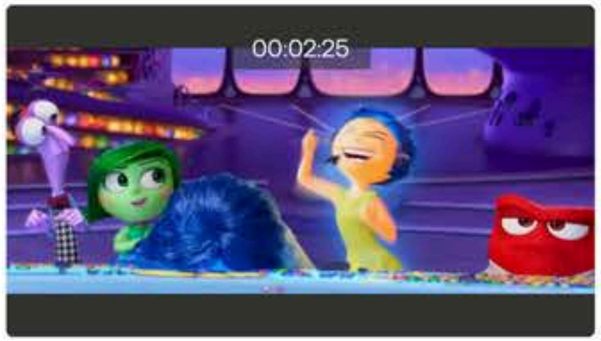



FURIOSA : A MAD MAX SAGA | OFFICIAL TRAILER...

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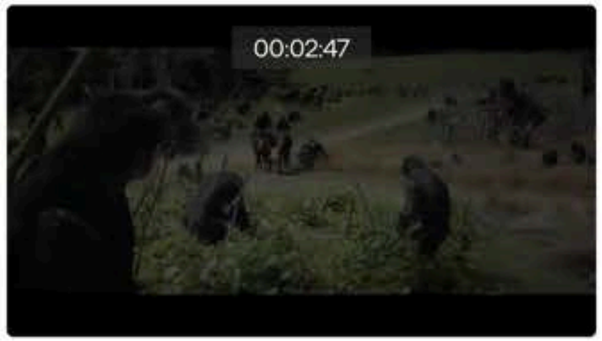
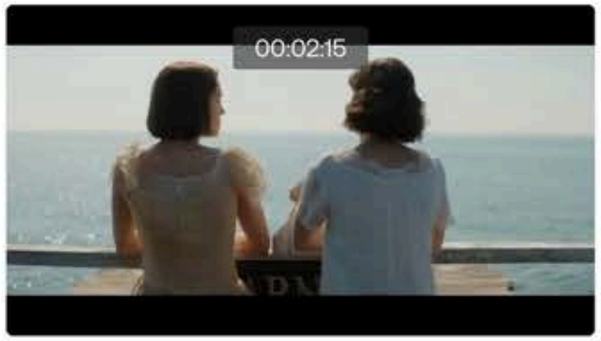
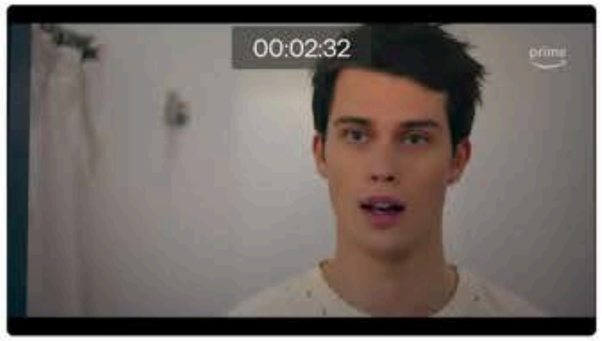



Kingdom of the Planet of the Apes | Final Trailer

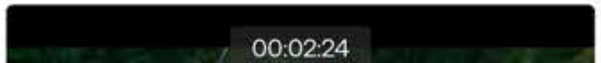
Transformers One _ Official Trailer (2024) - Chris ...




Young Woman and the Sea _ Official Trailer.mp4




The Idea of You - Official Trailer _ Prime Video.m...



# Classify

Choose index

Infinite Jest

Select class group Edit

Movie Genre

Filter by class

Action Sci-Fi Horror +7

Advanced parameters

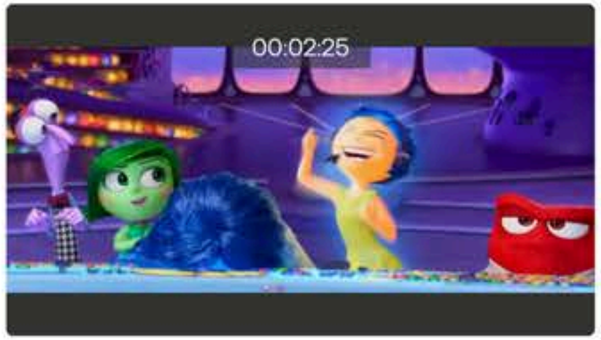
Run

## Videos in Infinite Jest

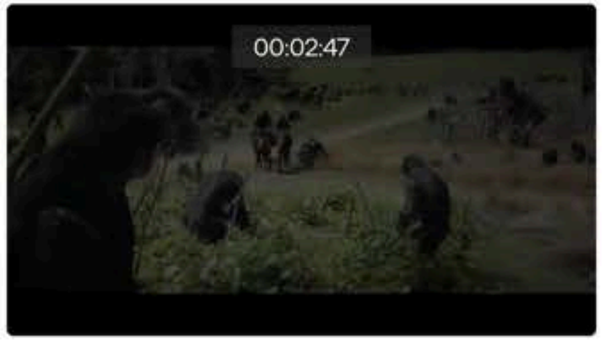
20 videos (Total 51m 50s) • Index created on Jun 09, 2024

Sort by : Recent upload

FURIOSA : A MAD MAX SAGA | OFFICIAL TRAILER...

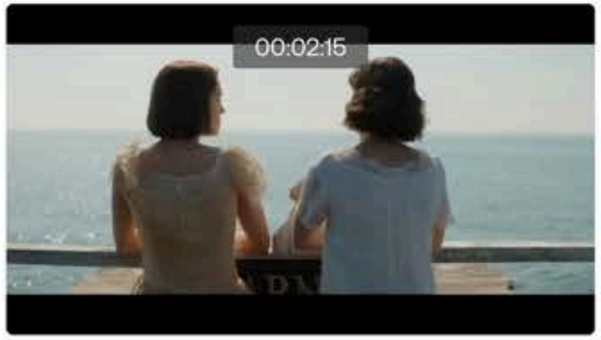



Inside Out 2 | Official Trailer

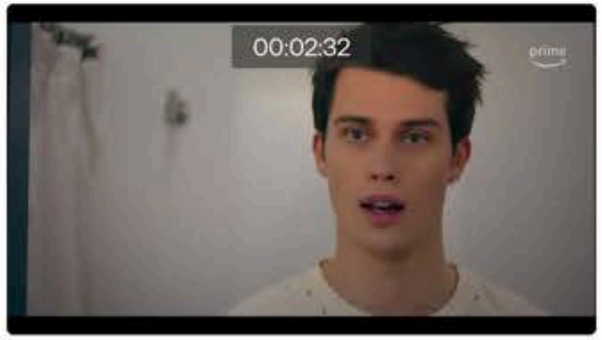



Kingdom of the Planet of the Apes | Final Trailer

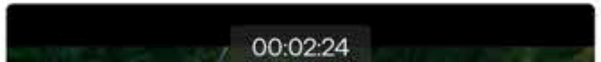
Transformers One _ Official Trailer (2024) - Chris ...




Young Woman and the Sea _ Official Trailer.mp4




The Idea of You - Official Trailer _ Prime Video.m...



Classify | Twelve Labs

playground.twelvelabs.io/indexes/66653a83fa7835326810108d/classify?cg=6665431cbf8c7dffa04d7d2...

New Chrome available

Beta

Overview Indexes Examples

Lucy Low

# Classify

Choose index

Infinite Jest

Select class group Edit

Movie Genre

Filter by class

Action Sci-Fi Horror +7

Advanced parameters

Run

## Classify Results • 8 classes, 19 videos

</> View code

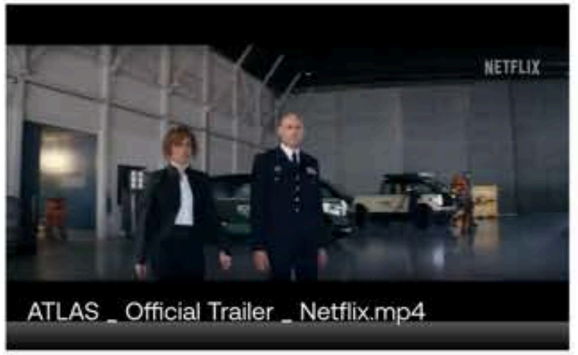
**What is Score and Duration Ratio?**

Score is a number that indicates the confidence level of the video segment's match with a certain class.
Duration ratio is the ratio of the sum of the lengths of the matching video segments divided by the total length of the video.

### Sci-Fi • 3 videos

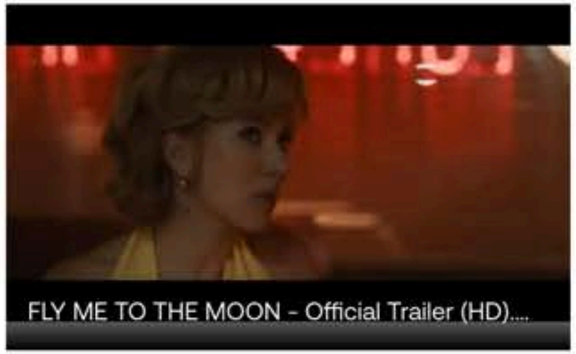
Transformers One _ Official Trailer (2024) - C...

| | |
|---|---|
| Score | 95 |
| Duration ratio | 88% |




ATLAS _ Official Trailer _ Netflix.mp4

| | |
|---|---|
| Score | 94 |
| Duration ratio | 79% |



FLY ME TO THE MOON - Official Trailer (HD)...

| | |
|---|---|
| Score | 76 |
| Duration ratio | 12% |

How are the classification results?

### Action • 6 videos

See more

# Classify

Choose index

Infinite Jest

Select class group Edit

Movie Genre

Filter by class

Action Sci-Fi Horror +7

Advanced parameters

Run

## Classify Results • 8 classes, 19 videos

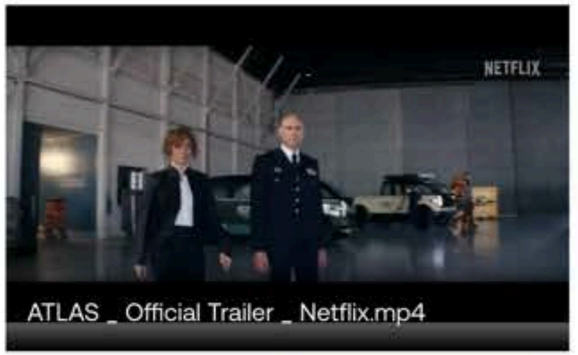
</> View code

### Sci-Fi • 3 videos

Transformers One _ Official Trailer (2024) - C...

Score 95

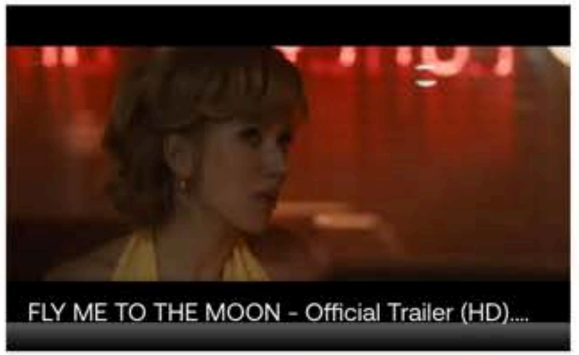
Duration ratio 88%




ATLAS _ Official Trailer _ Netflix.mp4

Score 94

Duration ratio 79%



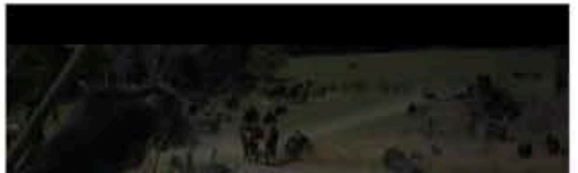
FLY ME TO THE MOON - Official Trailer (HD)....

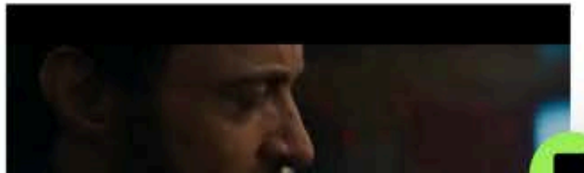
Score 76

Duration ratio 12%

### Action • 6 videos

See more





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Advanced parameters

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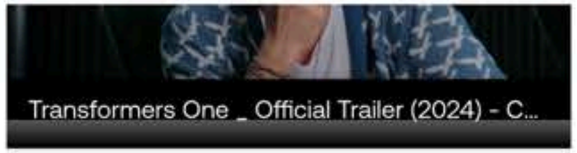
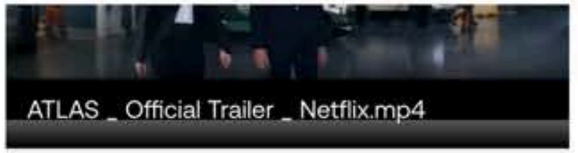
## Classify Results • 8 classes, 19 videos

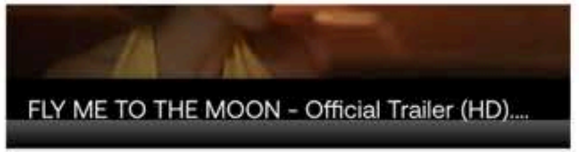
</> View code




Score 95
Duration ratio 88%




Score 94
Duration ratio 79%

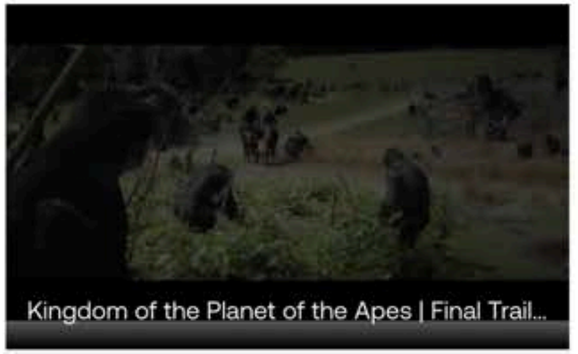



Score 76
Duration ratio 12%

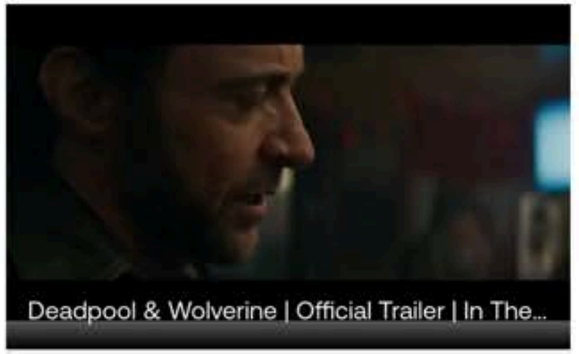
## Action • 6 videos

See more

Score 94
Duration ratio 78%




Score 87
Duration ratio 53%




Score 87
Duration ratio 53%

# Classify

Choose index

Infinite Jest

Select class group Edit

Movie Genre

Filter by class

Action Sci-Fi Horror +7

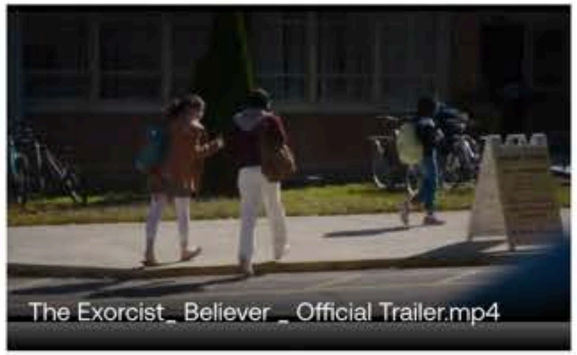
Advanced parameters

Run

## Classify Results • 8 classes, 19 videos

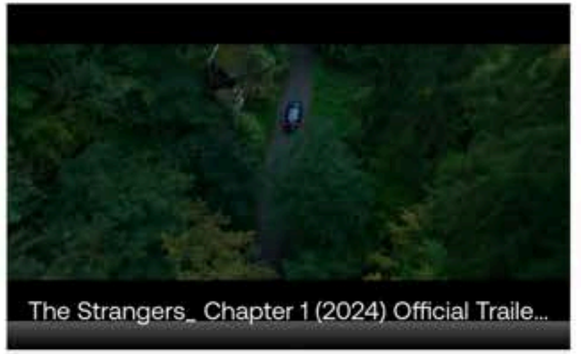
</> View code

### Horror • 2 videos




Score 85

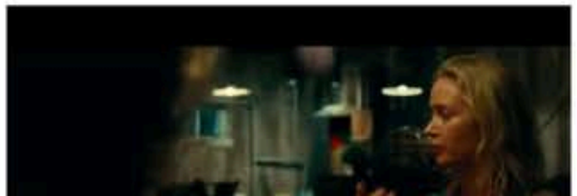
Duration ratio 43%

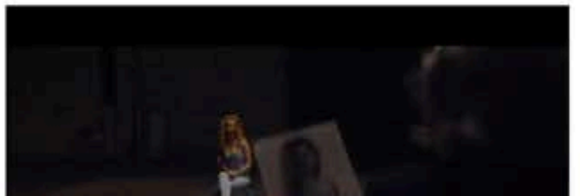



Score 83

Duration ratio 36%

### Thriller • 3 videos





Classify | Twelve Labs

playground.twelvelabs.io/indexes/66653a83fa7835326810108d/classify?cg=6665431cbf8c7dffa04d7d2...

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Overview Indexes Examples

Lucy Low

# Classify

Choose index

Infinite Jest

Select class group Edit

Movie Genre

Filter by class

Action Sci-Fi Horror +7

Advanced parameters

Run

## Classify Results • 8 classes, 19 videos

</> View code

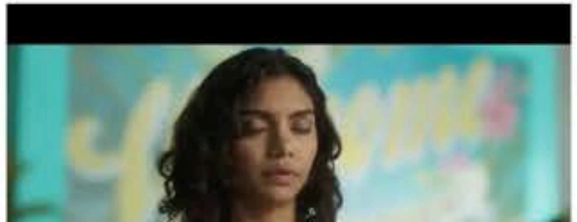
### Thriller • 3 videos

Score 84
Duration ratio 42%

Score 84
Duration ratio 40%

Score 74
Duration ratio 12%

### Adventure • 1 video



Classify | Twelve Labs

playground.twelvelabs.io/indexes/66653a83fa7835326810108d/classify?cg=6665431cbf8c7dffa04d7d2...

New Chrome available

Beta

Overview Indexes Examples

Lucy Low

Classify

Choose index

Infinite Jest

Select class group

Movie Genre

Filter by class

Action Sci-Fi

Advanced parame

View code

See more

## Transformers One _ Official Trailer (2024) - Chris Hemsworth, Brian Tyree Henry, Scarlett Johansson.mp4

1:26 / 3:21

How is the classification result?

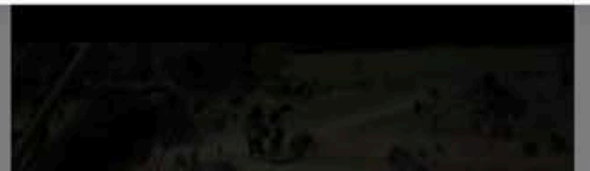
Classified results (2)

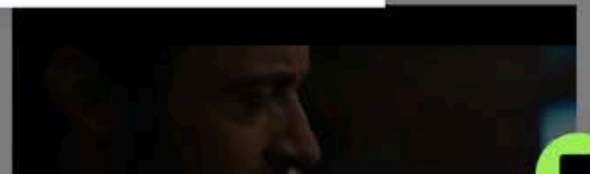
**Sci-Fi**

| | |
|---|---|
| Score | 95 |
| Duration ratio | 88% |

**Action**

| | |
|---|---|
| Score | 89 |
| Duration ratio | 60% |





Classify | Twelve Labs

playground.twelvelabs.io/indexes/66653a83fa7835326810108d/classify?cg=6665431cbf8c7dffa04d7d2...

New Chrome available

Beta

Overview Indexes Examples

Lucy Low

Classify

Choose index

Infinite Jest

Select class group

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Action Sci-Fi

Advanced parame

View code

See more

## Transformers One _ Official Trailer (2024) - Chris Hemsworth, Brian Tyree Henry, Scarlett Johansson.mp4

How is the classification result?

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| Score | 95 |
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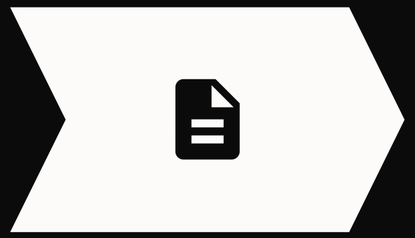
**Action**

| | |
|---|---|
| Score | 89 |
| Duration ratio | 60% |

Trailer (HD)...

BORDERLANDS

## 1. Ingest Video Content:

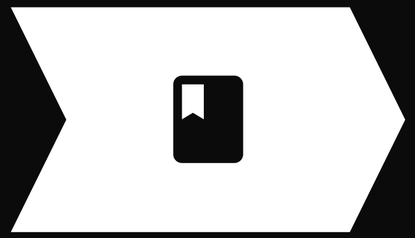


Use the Twelve Labs Embed API to convert a selected library of 15-20 movie and TV show trailers, including popular titles like "Deadpool & Wolverine," into high-quality video embeddings. This process involves analyzing each trailer's visual, audio, and textual elements to create detailed vector representations.

## 2. Store Embeddings:

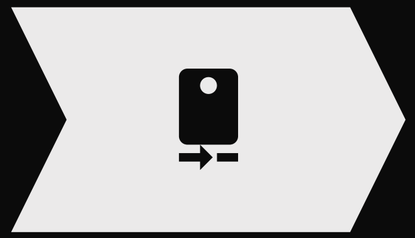
Store the generated video embeddings in a high-performance vector database, such as Pinecone or Milvus, to enable fast and efficient retrieval of relevant data when processing user queries.

## 3. Develop User Interface:



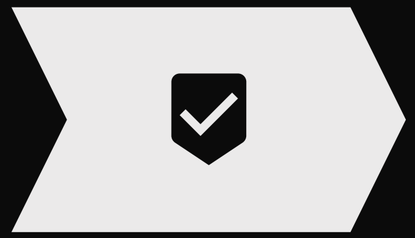
Design and implement a user-friendly interface using Streamlit that allows users to interact with the chatbot. This interface should support intuitive navigation and enable users to input specific questions about the trailers, such as "What is Wolverine's role in the Deadpool trailer?"

## 4. Implement RAG Retrieval:



Integrate Retrieval-Augmented Generation (RAG) into the system. This involves using the vector database to retrieve the most relevant video embeddings based on the user's question and then passing these embeddings to the language model to generate contextually accurate answers.

## 5. Generate Responses:



Utilize a sophisticated language model to generate precise and informative responses. The model incorporates the context from the retrieved video embeddings to provide detailed answers to user questions. For example, it can describe specific action scenes or character roles in trailers like "Deadpool & Wolverine."

# Video Embedding

https://deuqpmn4rs7j5.cloudfront.net/66649f09937ce44a0402bad4/66659a3efa7835326810120c/thumbnails/fd31bdd0-eaf4-427f-bc27-6cb7939e6249.0000001.jpg


```
VIDEO ID: 66659a48d22b3a3c97bf1d5f
{'_id': '66659a3efa7835326810120c',
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 'estimated_time': '2024-06-09T12:07:40.728Z',
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         'updated_at': '2024-06-09T12:04:59.781Z',
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 'metadata': {'duration': 159,
              'filename': 'Deadpool & Wolverine | Official Trailer | In '
                          'Theaters July 26',
              'height': 720,
              'width': 1280},
 'status': 'ready',
 'type': 'index_task_info',
 'updated_at': '2024-06-09T12:08:52.222Z',
 'video_id': '66659a48d22b3a3c97bf1d5f'}
```
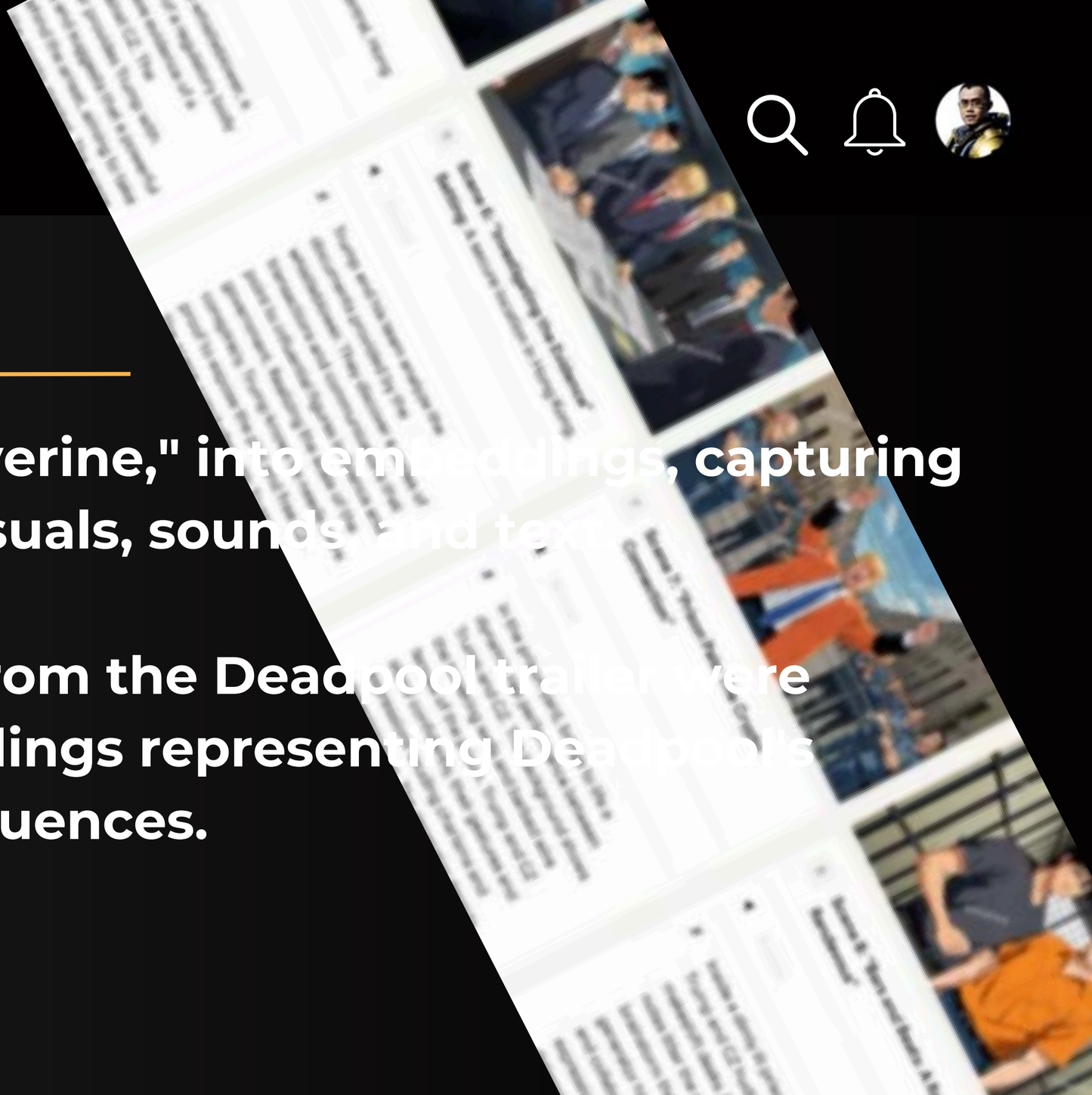

INFINITE JEST

# Video Embedding

Convert "Deadpool & Wolverine," into embeddings, capturing various aspects such as visuals, sounds, and text.

For example, key scenes from the Deadpool trailer were broken down into embeddings representing Deadpool's iconic lines and action sequences.



INFINITE JEST

```
[ ]  end = time.time()
     print("Finish uploading video")
     print("Time elapsed (in seconds): ", end - start)
```

```
Start uploading video
Status code: ready
Finish uploading video
Time elapsed (in seconds):  245.4978461265564
```

```
# Retrieve the unique identifier of the video
VIDEO_ID = response.json().get('video_id')

# Print the status code, the unique identifier of the video, and the
print(f"VIDEO ID: {VIDEO_ID}")
pprint(response.json())
```

```
VIDEO ID: 66659a48d22b3a3c97bf1d5f
{'_id': '66659a3efa7835326810120c',
 'created_at': '2024-06-09T12:04:14.069Z',
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         'thumbnail_urls': ['https://deuqpmn4rs7j5.cloudfront.net/66
         'updated_at': '2024-06-09T12:04:59.781Z',
         'video_url': 'https://deuqpmn4rs7j5.cloudfront.net/66649f09
 'index_id': '666599d4e6fb7df29de0f89c',
 'metadata': {'duration': 159,
              'filename': 'Deadpool & Wolverine | Official Trailer |
                          'Theaters July 26',
              'height': 720,
              'width': 1280},
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 'type': 'index_task_info',
 'updated_at': '2024-06-09T12:08:52.222Z',
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```

INFINITE JEST

```
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                        'engine_options': ['visual',
                                           'conversation',
                                           'text_in_video',
                                           'logo']},
                       {'engine_name': 'pegasus1',
                        'engine_options': ['visual', 'conversation']
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           'total_duration': 0,
           'updated_at': '2024-06-08T18:13:05.563Z',
           'video_count': 0},
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                                           'conversation',
                                           'text_in_video',
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                       {'engine_name': 'pegasus1',
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```

INFINITE JEST

```
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                'video_count': 20},
               {'_id': '666599d4e6fb7df29de0f89c',
                'addons': ['thumbnail'],
                'created_at': '2024-06-09T12:02:28.658Z',
                'engines': [{'engine_name': 'marengo2.6',
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                                                'text_in_video',
                                                'logo']},
                            {'engine_name': 'pegasus1',
                             'engine_options': ['visual', 'conversation']
                'expires_at': '2024-09-07T12:02:28.658Z',
                'index_name': 'Content Creator Videos',
                'total_duration': 159,
                'updated_at': '2024-06-09T12:04:24.197Z',
                'video_count': 1}],
     'page_info': {'limit_per_page': 10,
                   'page': 1,
                   'total_page': 1,
                   'total_results': 3}}
```

For this demo, let's go with Content Creator videos.

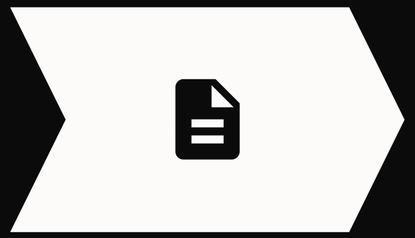
```
[ ]  %env INDEX_ID=666599d4e6fb7df29de0f89c

     env: INDEX_ID=666599d4e6fb7df29de0f89c
```

INFINITE JEST

# PINECONE MOVIE VECTOR DATABASE

Stored the video embeddings in a Pinecone vector database for efficient retrieval. The database allows us to quickly access specific moments from trailers based on the user's queries.

## 1. Ingest Video Content:

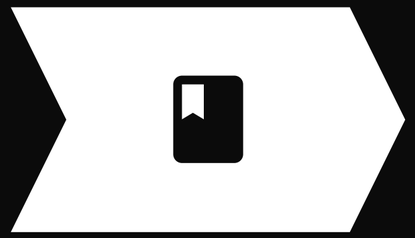


Use the Twelve Labs Embed API to convert a selected library of 15-20 movie and TV show trailers, including popular titles like "Deadpool & Wolverine," into high-quality video embeddings. This process involves analyzing each trailer's visual, audio, and textual elements to create detailed vector representations.

## 2. Store Embeddings:

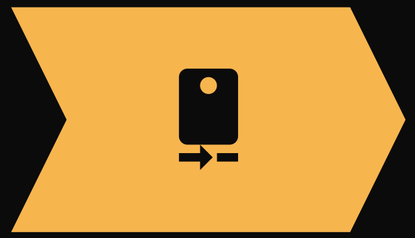
Store the generated video embeddings in a high-performance vector database, such as Pinecone or Milvus, to enable fast and efficient retrieval of relevant data when processing user queries.

## 3. Develop User Interface:



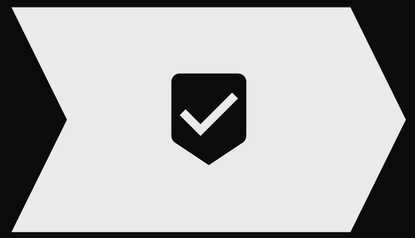
Design and implement a user-friendly interface using Streamlit that allows users to interact with the chatbot. This interface should support intuitive navigation and enable users to input specific questions about the trailers, such as "What is Wolverine's role in the Deadpool trailer?"

## 4. Implement RAG Retrieval:



Integrate Retrieval-Augmented Generation (RAG) into the system. This involves using the vector database to retrieve the most relevant video embeddings based on the user's question and then passing these embeddings to the language model to generate contextually accurate answers.

## 5. Generate Responses:



Utilize a sophisticated language model to generate precise and informative responses. The model incorporates the context from the retrieved video embeddings to provide detailed answers to user questions. For example, it can describe specific action scenes or character roles in trailers like "Deadpool & Wolverine."

Default

DATABASE

Indexes (2)

sample-movies

infinitejest

Collections

MANAGE

API Keys

Members

Back to indexes

Connect

## infinitejest

| METRIC | DIMENSIONS | HOST |
|---|---|---|
| cosine | 1 | https://infinitejest-wt58k9q.svc.aped-4627-b74a.pinecone.io |

| CLOUD | REGION | TYPE | VECTOR COUNT |
|---|---|---|---|
| aws AWS | us-east-1 | Serverless | 0 |

Matches: 1-10 of 10

Upsert Record

1

ID
59

VALUES
-0.0109432032, -0.0416535065, -0.0139455525, -0.0305336956, -0.019152240...

SCORE
-0.0058

METADATA
**box-office:** 961691209
**summary:** "Captain Barbossa, Will Turner and Elizabeth Swann must sail off the edge of the map, navigate treachery and betra...
**title:** "Pirates of the Caribbean: At World's End"
**year:** 2007

STARTER USAGE

| | |
|---|---|
| RUs | 0 / 1M |
| WUs | 0 / 2M |
| Storage | 0 / 2GB |

Upgrade now

Default

DATABASE

Indexes (2)

sample-movies

infinitejest

Collections

MANAGE

API Keys

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STARTER USAGE

| | |
|---|---|
| RUs | 0 / 1M |
| WUs | 0 / 2M |
| Storage | 0 / 2GB |

Upgrade now

**1**

ID: 64

VALUES: -0.0116712078, -0.0114456778, -0.000101899888, -0.018731568, -0.017804388, ...

SCORE: -0.0025

METADATA
**box-office:** 941637960
**summary:** "A clownfish named Marlin sets out to find his abducted son Nemo along with a forgetful fish named Dory. They enc...
**title:** "Finding Nemo"
**year:** 2003

**2**

ID: 43

VALUES: 0.00280666864, -0.0286260918, -0.0113552734, -0.0317381807, -0.018595386...

SCORE: -0.0044

METADATA
**box-office:** 1046721266
**summary:** "Jack Sparrow and Barbossa embark on a quest to find the elusive fountain of youth, only to discover that Blackbea...
**title:** "Pirates of the Caribbean: On Stranger Tides"
**year:** 2011

**3**

ID: 79

VALUES: 0.0205002595, -0.0261066109, 0.00493970374, -0.025859464, -0.0268220399,...

SCORE: -0.0045

METADATA
**box-office:** 877244782
**summary:** "Manny, Diego, and Sid embark on their greatest adventure after a cataclysm sets an entire continent adrift, leading...
**title:** "Ice Age: Continental Drift"

Default

DATABASE

Indexes (2)

sample-movies

infinitejest

Collections

MANAGE

API Keys

Members

STARTER USAGE

| | |
|---|---|
| RUs | 0 / 1M |
| WUs | 0 / 2M |
| Storage | 0 / 2GB |

Upgrade now

**4**

ID: 12

VALUES: -0.00395694794, -0.0572648756, -0.0213244203, -0.0161525924, -0.01581529...

SCORE: -0.0053

METADATA
**box-office:** 1453683476
**summary:** "Elsa, Anna, Kristoff, Olaf, and Sven embark on a journey beyond Arendelle to discover the origin of Elsa's magical p...
**title:** "Frozen II"
**year:** 2019

**5**

ID: 3

VALUES: -0.0152355973, -0.0382521413, -0.00757387374, -0.0331819765, -0.0197661165...

SCORE: -0.0070

METADATA
**box-office:** 2264743305
**summary:** "A tragic love story set aboard the ill-fated RMS Titanic. A young aristocrat, Rose, falls in love with a poor artist, Jac...
**title:** "Titanic"
**year:** 1997

**6**

ID: 1

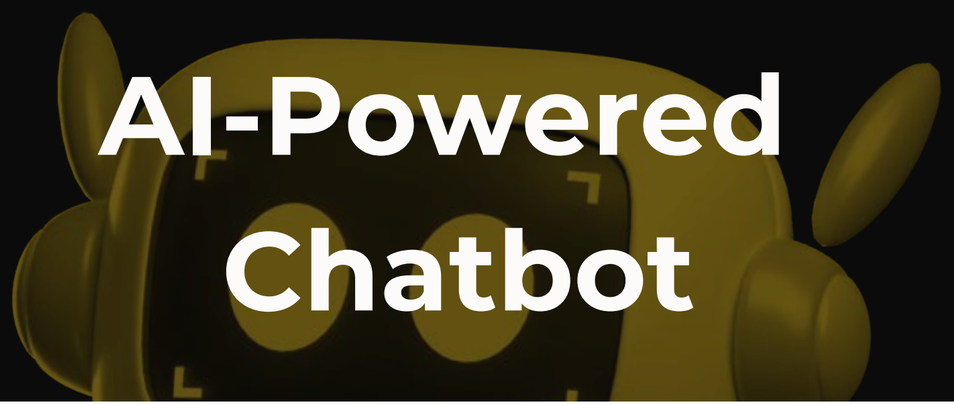
VALUES: -0.0158604607, -0.0371250398, -0.0158855952, -0.0265932921, -0.000896235...

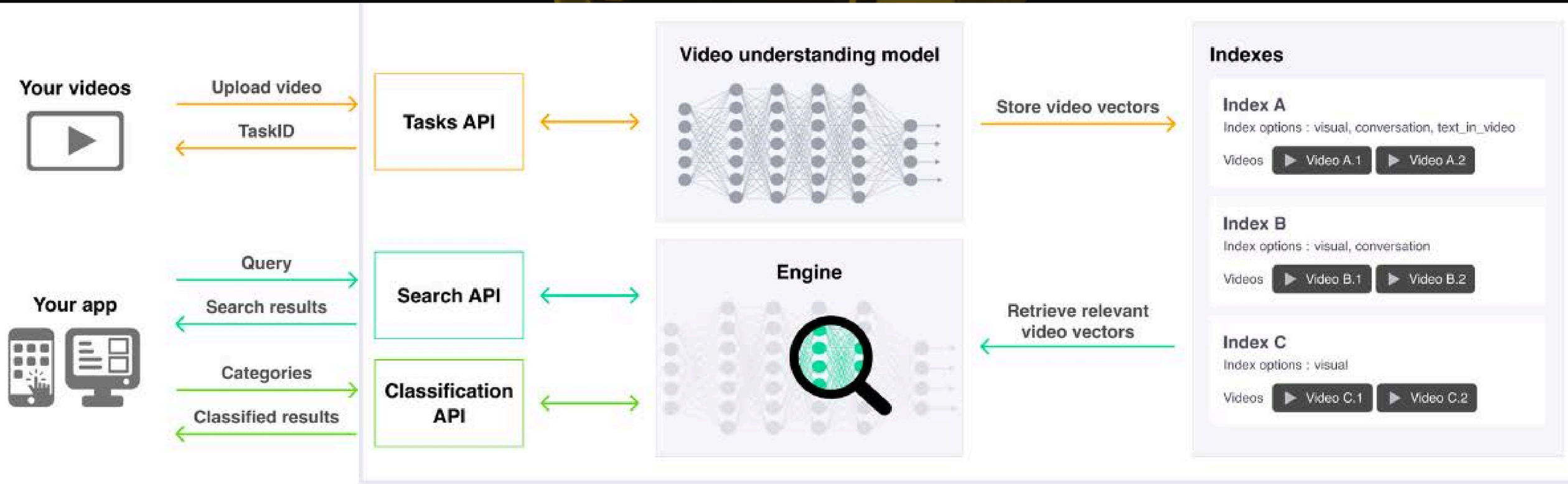
SCORE: -0.0076

METADATA
**box-office:** 2799439100
**summary:** "In the aftermath of Thanos wiping out half of the universe, the remaining Avengers assemble once more to undo th...
**title:** "Avengers: Endgame"

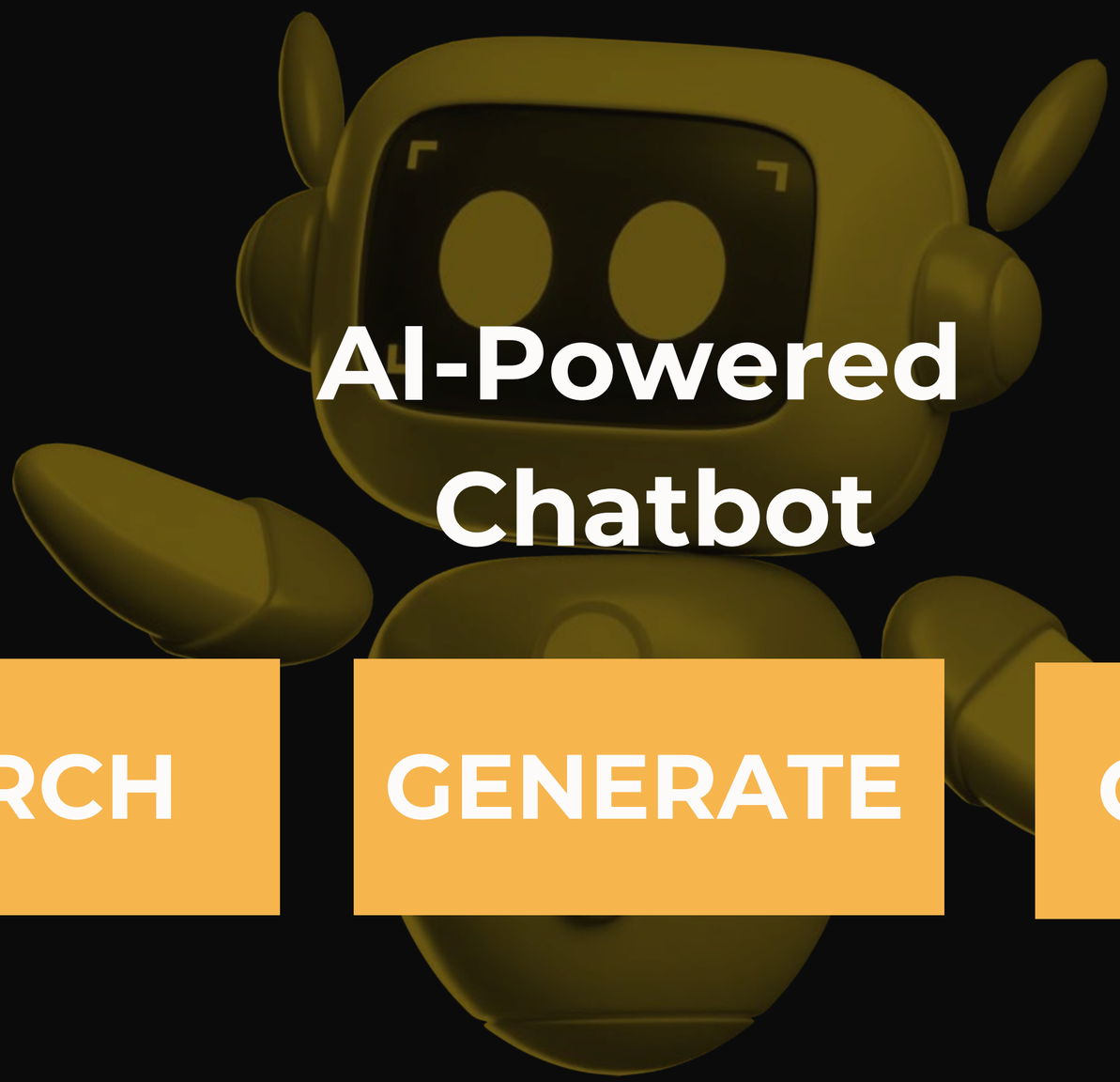
INFINITE JEST

# AI-Powered Chatbot





INFINITE JEST



# AI-Powered Chatbot

SEARCH

GENERATE

CLASSIFY

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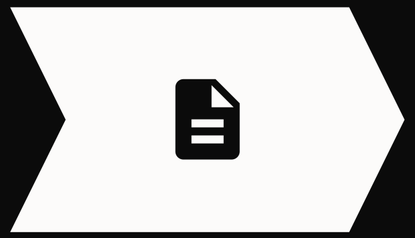

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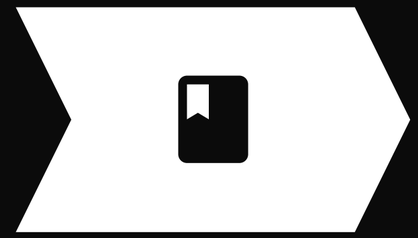

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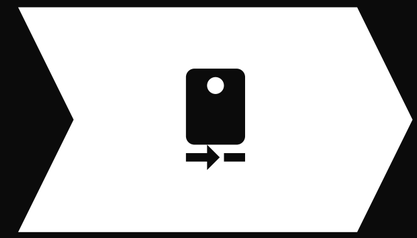

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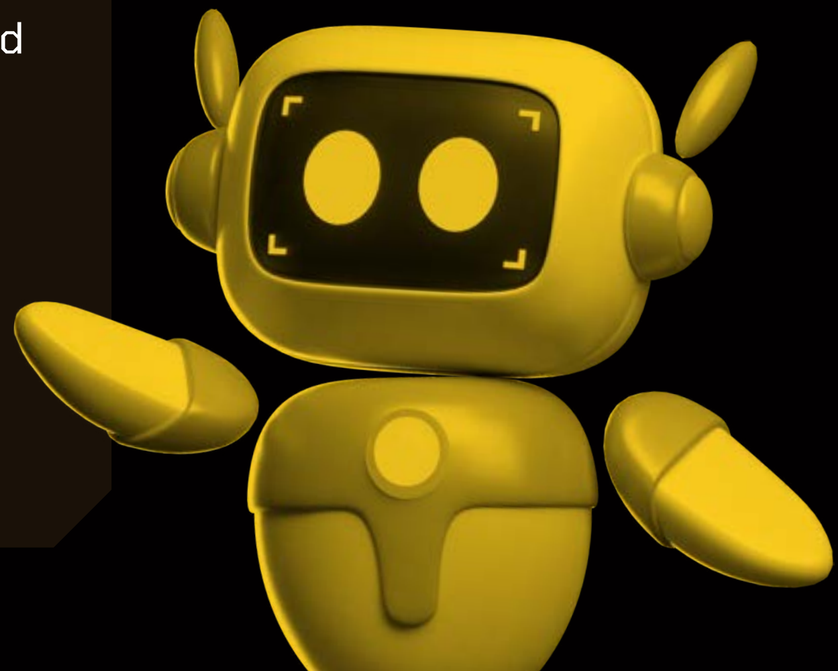
INFINITE JEST

# RAG VIDEO CHATBOT

**User: "Tell me about Deadpool's first appearance in the trailer."**

Chatbot Response: "Deadpool's first appearance in the trailer occurs around the 15-second mark. He makes a dramatic entrance with his signature red suit and mask, immediately engaging in witty banter."

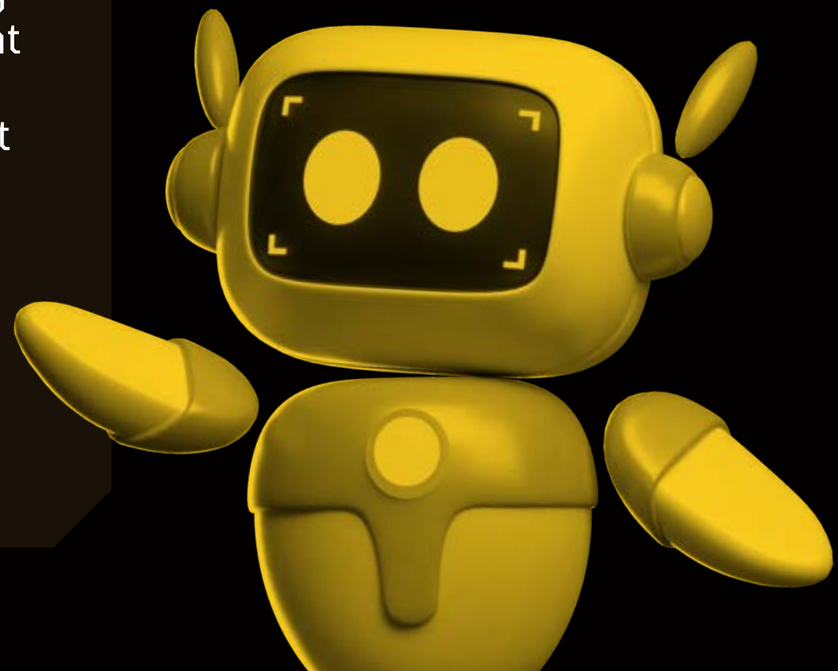


INFINITE JEST

# RAG VIDEO CHATBOT

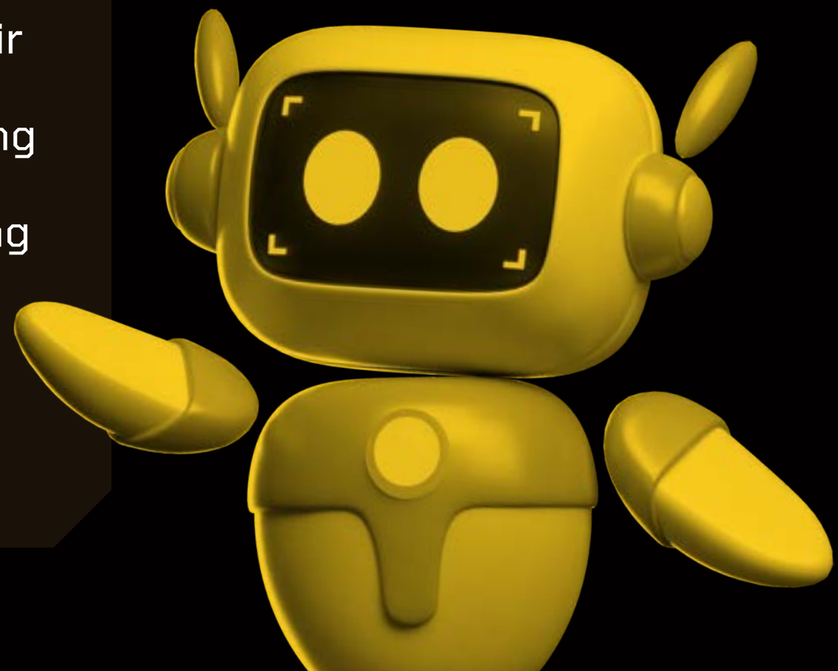
**User: "Summarize the main plot of the Deadpool & Wolverine trailer."**

Chatbot Response: "The 'Deadpool & Wolverine' trailer introduces a thrilling clash between the two iconic characters. It highlights Deadpool's irreverent humor and Wolverine's brooding intensity. The trailer showcases several action scenes, including an epic fight between the two, while also hinting at an underlying plot involving a new threat they must face together. The combination of humor, action, and character dynamics promises an exciting and entertaining movie."



INFINITE JEST

# RAG VIDEO CHATBOT

**User: "What are some funny moments in the trailer?"**

Chatbot Response: "There are several funny moments in the trailer:
Deadpool makes a sarcastic comment about Wolverine's claws during their fight, saying, 'Nice manicure, did you get those done at a salon?'
Deadpool's dramatic entrance is followed by a quip about his costume being 'freshly laundered.'
In a brief scene, Deadpool tries to annoy Wolverine by imitating his growling voice and stance, leading to a comical exchange."