**Patchwork Library Analyzer + Search API**

1. **API Endpoints:**

* **POST /analyse**

**Fields**:

{

"**video\_link**": <https://renderer.ezr.llc/render/6808076b27ed09a50637439a>

}

**Response**:  
{

"**title**": "n3on playing against WNBA player",

"**description**": "Some video description",

"**tags**": ["trending", "n3on"],

"**upload\_date**": "2025-04-23"

}

**Explanation**

* **POST /find\_clips**

**Fields**:

{

"**search\_query**":

"**tags**"**: []**

}

**Response**:  
{

"**title**": "Some video title",

"**description**": "Some video description",

"**tags**": ["trending", "n3on"],

"**upload\_date**": "2025-04-02"

}

1. **OpenAI Analysis**

* Frame Extraction:  
  Each video is divided into frames at 5-second intervals (frame\_step\_time = 5s).
* Batch Processing:  
  Selected frames are grouped and sent to the OpenAI API using the GPT-4.1 mini model for analysis.
  + The model returns a JSON with:
  + Title
  + Description
  + Tags
* Upload this data into MongoDB Atlas

GPT-4.1 nano Pricing

|  |  |  |  |
| --- | --- | --- | --- |
| Component | Rate | Estimated Usage per Video | Cost per Video |
| Input Tokens | $0.10 / 1M tokens | ~500 tokens (prompt + image refs) | ~$0.00005 |
| Output Tokens | $0.40 / 1M tokens | ~500 tokens (description + tags) | ~$0.00020 |
| Image Frames | ~5–10 frames → ~$0.0015 each (est.) | ~5–10 frames | ~$0.0075–0.015 |

**Total Estimated Cost per Video (Analysis):**

$0.0075 – $0.0150 per video

**Bulk pricing (1,000 videos):**  
$7.5 – $15 / 1,000 videos

**Price for 10000 videos:** 75 – 150$

**NOTE: This is 1 time cost, for video analysis only**

1. **MongoDB Atlas**

Create and pay for M10 cluster after we use this cluster to store json data that we got from OpenAI analysis tool.   
Then we integrate Atlas Search option to easily navigate through all data and get response that we need.

M10 Cluster cost: 57$/month

https://www.mongodb.com/pricing

1. **Video Access Process**

User searches using keywords and tag filters

Query is sent to the backend and passed to MongoDB Atlas Search

Matching metadata is returned

Video files are streamed from Patchwork API using pre-signed URLs

1. **UI**

Search Input Field: Accepts natural language descriptions (e.g., "a n3on watching replays")

Tags Sidebar: Users can filter results using tags like "n3on", "jynxzi", "trending", etc.

Results Grid: Shows thumbnails, titles, and date. Clicking a card plays the video using a signed URL.

Make “Trending” tag to show relevant clips

1. **Total Pricing**

M10 Cluster cost: 57$/month

OpenAI API cost: 75-150$ - 1 time cost

1. **Timeline**

Analyzer: 2-3 days

MongoDB Integration: 2-3 days

Testing: 1 day

Total: 1 week