

# Live Pulse: Tuning into Concert Sentiments

Biniam Early

<https://github.com/Biniamearly/sql-project.git>

# Live Nation



**Stakeholders:** Live Nation Entertainment and stakeholders in the live music industry.

**Goal:** Improving the assessment and rating of concerts and live events, and enhancing the accessibility and reliability of this information.


**Solution:** By integrating and analyzing data from Ticketmaster API and social media platforms to gain insights into audience sentiments and preferences.

# Background

**Role:** Sr. Business Data Analyst.


**Responsibilities:** Data analysis, hypothesis evaluation, strategic problem-solving within the live entertainment industry.


**Tools and Skills:** Proficiency in SQL, data synthesis from extensive datasets, strategic decision-making based on data insights.





### Sr. Business Data Analyst

Apply

 Beverly Hills, CA, USA

 Full time

 Posted 30+ Days Ago

 JR-66930

Job Summary:

**WHO ARE WE?**

Live Nation Entertainment is the world's leading live entertainment and eCommerce company, comprised of four market leaders: Ticketmaster.com, Live Nation Concerts, Front Line Management Group and Live Nation Network. [Ticketmaster.com](https://www.ticketmaster.com) is the global event ticketing leader and one of the world's top five eCommerce sites, with over 26 million monthly unique visitors. Live Nation Concerts produces over 20,000 shows annually for more than 2,000 artists globally. Front Line is the world's top artist management company, representing over

# API

## Ticketmaster Discovery API

### Data Gathered:

- Event information
  - Name
  - Location
  - etc.

## Discovery API

V 2.0

The Ticketmaster Discovery API allows you to search for events, attractions, or venues.

### Overview

#### Authentication

To run a successful API call, you will need to pass your API Key in the `apikey` query parameter. **Your API Key should automatically appear in all URLs throughout this portal.**

Example: <https://app.ticketmaster.com/discovery/v2/events.json?apikey=LuNjHaXl8SEWiYIGKoaYTrNxeyGGqaIT>

Without a valid API Key, you will receive a `401` Status Code with the following response:

```
{
  "fault": {
    "faultstring": "Invalid ApiKey",
    "detail": {
      "errorcode": "oauth.v2.InvalidApiKey"
    }
  }
}
```

# API

## Gemini AI API

### Data gathered:

- Analyzed:
  - Sentiment Score
  - Emotion
  - Review Type



Google AI for Developers > Products

Was this helpful?

## Google AI Studio quickstart

[Send feedback](#)

[Google AI Studio](#) is a browser-based IDE for prototyping with generative models. Google AI Studio lets you quickly try out models and experiment with different prompts. When you've built something you're happy with, you can export it to code in your preferred programming language, powered by the [Gemini API](#).


Google AI Studio

- Get API key
- Create new
- My library
  - No prompts yet
- Getting started
- Documentation
- Prompt gallery
- Discord community
- AI Studio in Vertex
- Settings

Untitled prompt

Insert: Image Test input

Identify the city where this photo was taken and give a brief description of the city



Run settings Reset

☒ Model

Temperature 0.25

☐ Add stop sequence

Add stop...

Max outputs 1

Run Text preview 0 / 0

### Prompts and model tuning

Google AI Studio provides several interfaces for prompts that are designed for different use cases:

- Freeform prompts** - These prompts offer an open-ended prompting experience for generating content and responses to instructions. You can use both images and text data for your prompts. [Learn more](#)
- Structured prompts** - This prompting technique lets you guide model output by providing a set of example requests and replies. Use this approach when you need more control over the structure of model output. [Learn more](#)

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# Web Scrape

## Ticketmaster reviews

### Data Gathered:

- Reviews text

**REVIEWS** • 10000 ★ 4.8[Write a review](#)

★★★★★

**Great**

by Rie on 2/15/24 • Citizens Bank Park - Philadelphia

She was very good. I wish you would have done more of the high wire. Other than that, she was phenomenal.

★★★★★

**Terrible Venue**

by Brokenheart on 2/12/24

I love P!NK!! She is phenomenal!!!! When she came to Philly last year I had no doubt in buying one of the "best tickets available". However, I was horrified when I got to the stadium and saw the mad house and saw the absolutely chaos going on! The section I was on was a joke! Anybody with the right "connection" could come in! There was no well defined separate entrance for VIP, in no time most around me were drunk, the smell of beer was intolerable. I had to leave before the end because I was in so much discomfort I could not stand anymore! For her previous concert I flew to Vegas just to attend and it was remarkable.

★★★★★

**One of the best shows ever**

by Beth on 2/11/24 • T-Mobile Center - Kansas City

Outstanding performance and will be going again next year!

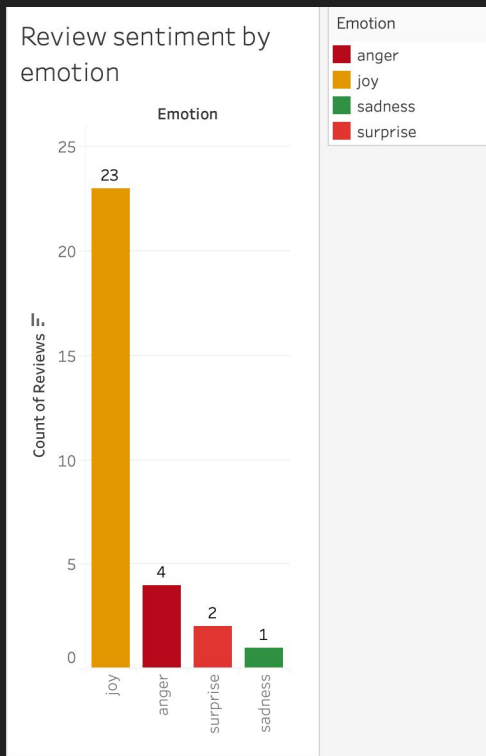
★★★★★

**Pink Concert**

by aalvrdo on 2/11/24 • Gainbridge Fieldhouse - Indianapolis

Concert was awesome and great. I would definitely go see her again! She knows how to give a pace.

# What are the most common emotions expressed in the reviews?



## Insights:

- 76% joyful
- 13% Anger\*\*
- ~1% surprise
- ~1% sadness

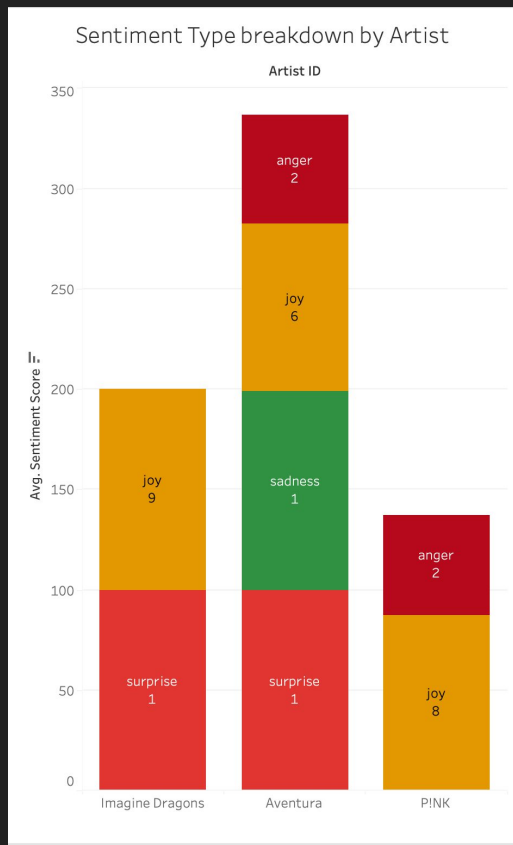
## Prediction:

- Maintained joyful fans
- Decreased negative reviews

## Recommendation:

- Continue monitoring
- Investigate negative reviews

# How are the artists viewed?



## Insights:

- Aventura ranks highest with a 100% sentiment score
- Imagine dragons and P!NK trail behind

## Prediction:

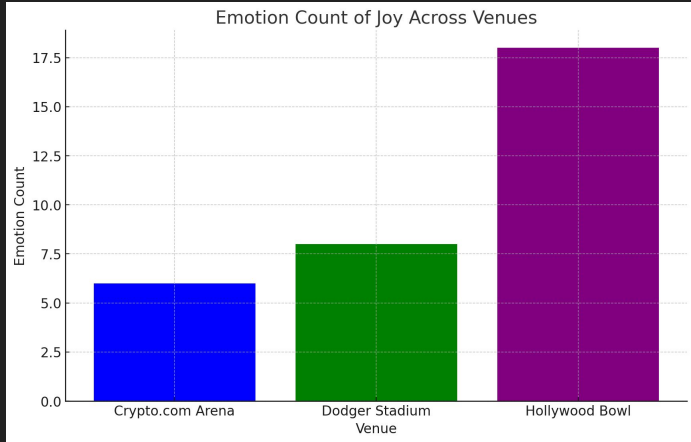
- Increased joyful fans
- Decreased negative reviews
- Increased Sentiment scores

## Recommendation:

- Continue monitoring
- Send survey to individuals negative sentiments



# Which venue is the most joyful?



## Insights:

- Hollywood Bowl leads by wide margin

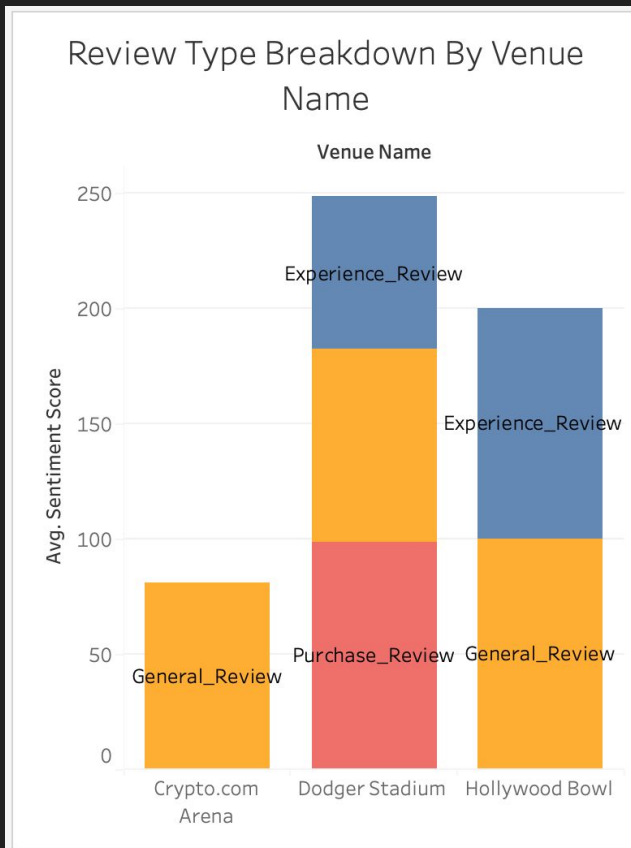
## Recommendation:

- Survey all venues and address any concerns

## Prediction:

- Increased joyful reviews and sentiment

# What type of reviews are being made?



## Insights:

- Most reviews are general review of the event

## Recommendation:

- Contact users with experience and or purchase issues
- Survey users directly for more info

## Prediction:

- Reduce the number of experience and or purchase reviews

## Summary:

- Data insights to tackle key issues in live entertainment

Effective data integration and analysis help predict trends, improve customer experiences, and guide strategic decisions.