

VENDOR

Progress Report 1

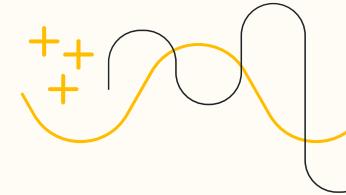
Gabriel Soares & Gabriel Munhoz



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01

The Problem



The Problem



All "Specials" results in New York, NY

1. Gourmets Fine Foods & Tapas Cafe

GOOD Spanish, Tapas, Wine Bar, Mexican

Open Now • Delivery • Takeout • Order Online

Cuisine: Spanish, Tapas, Wine Bar, Mexican

Delivery service: Open Now • Delivery • Takeout • Order Online

Order Online



2. Nini's

GOOD Spanish, Tapas, Wine Bar, Mexican

Open Now • Delivery • Takeout • Order Online

Cuisine: Spanish, Tapas, Wine Bar, Mexican

Delivery service: Open Now • Delivery • Takeout • Order Online

Order Online



3. El Rio Mexican Restaurant

GOOD Mexican, Tex-Mex, Mexican

Open Now • Delivery • Takeout • Order Online

Cuisine: Mexican, Tex-Mex, Mexican

Delivery service: Open Now • Delivery • Takeout • Order Online

Order Online



4. Boqueria Soho

GOOD Spanish, Tapas, Wine Bar, Mexican

Open Now • Delivery • Takeout • Order Online

Cuisine: Spanish, Tapas, Wine Bar, Mexican

Delivery service: Open Now • Delivery • Takeout • Order Online

Order Online



5. Tomato Taverne Gallega

GOOD Spanish, Tapas, Wine Bar, Mexican

Open Now • Delivery • Takeout • Order Online

Cuisine: Spanish, Tapas, Wine Bar, Mexican

Delivery service: Open Now • Delivery • Takeout • Order Online

Order Online



6. Dako

GOOD Spanish, Tapas, Wine Bar, Mexican

Open Now • Delivery • Takeout • Order Online

Cuisine: Spanish, Tapas, Wine Bar, Mexican

Delivery service: Open Now • Delivery • Takeout • Order Online

Order Online



7. Poco Loco Mediterranean Cuisine

GOOD Spanish, Tapas, Wine Bar, Mexican

Open Now • Delivery • Takeout • Order Online

Cuisine: Spanish, Tapas, Wine Bar, Mexican

Delivery service: Open Now • Delivery • Takeout • Order Online

Order Online



8. Alta

GOOD Spanish, Tapas, Wine Bar, Mexican

Open Now • Delivery • Takeout • Order Online

Cuisine: Spanish, Tapas, Wine Bar, Mexican

Delivery service: Open Now • Delivery • Takeout • Order Online

Order Online



9. Casa Mono

GOOD Spanish, Tapas, Wine Bar, Mexican

Open Now • Delivery • Takeout • Order Online

Cuisine: Spanish, Tapas, Wine Bar, Mexican

Delivery service: Open Now • Delivery • Takeout • Order Online

Order Online



10. Cartita

GOOD Spanish, Tapas, Wine Bar, Mexican

Open Now • Delivery • Takeout • Order Online

Cuisine: Spanish, Tapas, Wine Bar, Mexican

Delivery service: Open Now • Delivery • Takeout • Order Online

Order Online



spanish

New York, NY



Spanish restaurants in nyc

Maps Near Times square Images Web Results Best Upscale

About 23,600,000 results (0.37 seconds)

Results for New York, NY Choose area

Places Rating Cuisine Price Hours

Salinas Restaurant
4.6 ⭐⭐⭐⭐ (1.1K) - \$50–100 - Spanish
136 9th Ave

Closed - Opens 5:30 PM Tue
Chic Spanish choice with a garden room

Casa Mono
4.5 ⭐⭐⭐⭐ (620) - \$50–100 - Spanish
52 Irving Pl

Closed - Opens 12 PM
Buzzy Spanish tapas restaurant

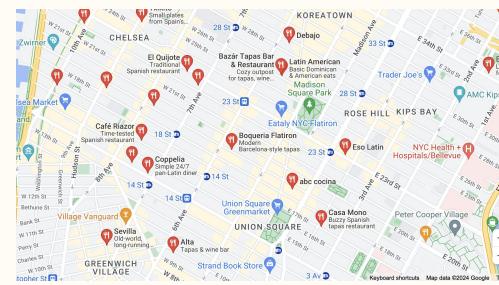
Tia Pol
4.5 ⭐⭐⭐⭐ (620) - \$50–100 - Spanish
205 10th Ave

Closed - Opens 3 PM Tue
Tiny Spanish tapas restaurant

More places →

More Categories

- Restaurants
- Latin American
- Bars
- Nightlife
- Food
- Caribbean
- Cuban
- Mexican
- Tapas/Small Plates
- Wine Bars
- Spanish
- Tapas Bars
- Salvadoran
- Event Planning & Services
- Sports Bars
- Fast Food
- Hot Dogs
- Tacos
- Venues & Event Spaces
- American
- Cafes
- Food Trucks
- Italian
- Juice Bars & Smoothies
- Mediterranean
- Puerto Rican



More Features

General Features

- Open At: 2:26 AM
- Open Now 5:27 AM
- Takes Reservations
- Accepts Credit Cards
- Offers Delivery
- Outdoor Seating
- Good for Kids
- Good for Groups
- Gender-neutral restrooms
- Open to All
- Offers Takeout
- Wheelchair Accessible
- Has TV
- Dogs Allowed
- Offers Military Discount
- Walter Service

Alcohol

Search

More Features

Alcohol

Meals Served

Music

Parking

- Street
- Garage
- Valet
- Private Lot
- Validated

Wi-Fi

Smoking

Search

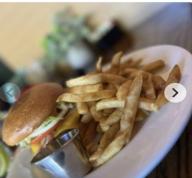
Poor Review Retrieval - Using Basic Keyword Search

Low Sodium Restaurants | Atlanta, GA Search

2. MetroFresh
★★★★★ 4.1 (343 reviews)
Soup Salad Breakfast & Brunch \$\$ • Midtown
Closed until 7:00 AM tomorrow
“The food here is so healthy! I love having fast **healthy options** nearby.” [more](#)
✓ Outdoor seating ✓ Delivery ✓ Takeout



3. Cafe Sunflower Buckhead
★★★★★ 4.3 (753 reviews)
Vegetarian Salad Vegan \$\$ • Buckhead
Closed until 11:30 AM tomorrow
⌚ Waitlist opens at 11:30 am
“But for those looking to have a delicious meal with **healthy options** this is your place!” [more](#)
✓ Outdoor seating ✓ Delivery ✓ Takeout Find a Table



4. South City Kitchen Midtown
★★★★★ 4.4 (3.3k reviews)
Southern \$\$ • Midtown
Closed until 11:00 AM tomorrow
“The friend chicken was HIGHLY disappointing. I love salt (I am not a **low sodium** eater by any...” [more](#)
✓ Outdoor seating ✓ Delivery ✓ Takeout



★★★★★ Nov 21, 2016
1 photo

Unfortunately, I think this place is over hyped. After seeing the reviews and hearing all the talk about it around town, I was excited to check it out. We made a dinner reservation and sat on the heated patio (I liked the Patio, inside was soo crowded and loud you wouldn't be able to have a conversation).

The service was okay, our waiter was a bit slow (though he was polite, made up for it at the end with complimentary dessert which I totally appreciate!).

We started with the crab soup and it was really quite amazing! creamy and tasty. From there we decided to split the fried chicken. The friend chicken was HIGHLY disappointing. I love salt (I am not a low **sodium** eater by any stretch). This chicken was SOO salty, it tasted like it was brimmed for a few too many days. Additionally, it was horribly greasy. Fried Chicken should not be THAT greasy, it tasted as if they didn't put it in hot enough oil so it soaked it all in.

The cocktails and dessert were all pretty okay. I liked them but didn't think they were worth raving about. Unfortunately for me, this place did not live up to the hype.


Amazing she crab soup

The Solution

02



Key Features



+



Restaurant Search

- Flexible LLM Search to quickly find restaurants
- Narrow down the search

Conversational

- Talk to the AI and ask questions back and forth
- Very specific queries



Google Search vs ChatGPT Search

Posted by u/delete_dls 11 months ago
3.3k This is why I use ChatGPT more than Google now
l.imgur.com/zQ9w8m...
Other

Popular llm ais?

There are several popular LLM (Large Language Model) AIs, some of which are:

1. GPT-3 (Generative Pre-trained Transformer 3) developed by OpenAI
2. T5 (Text-to-Text Transfer Transformer) developed by Google
3. BERT (Bidirectional Encoder Representations from Transformers) developed by Google
4. XLNet (eXtreme Multi-Label Learning with Neural Networks) developed by Carnegie Mellon University and Google
5. RoBERTa (Robustly Optimized BERT Approach) developed by Facebook AI Research (FAIR)

popular llm ais

All News Images Videos Maps Shopping

Try again with this?
popular [images](#) popular [games](#) popular [lms](#)
popular [plays](#)

LLM GUIDE
<https://llm-guide.com> · maritime-law
50 Most Popular LLMs in Maritime Law 2023
LL.M. in Maritime Law ; 8, University of Southampton - School of Law ; 9, Tulane University - Tulane Law School.
Missing: [ais](#) | Must include: [ais](#)

<https://llm-guide.com/most-popul...>

Most Popular LLM Programs
Most Popular LLM Programs in March 2023 ; 5, Harvard University - Harvard Law School (HLS) ; 6, University o...

U.S. News & World Report
<https://www.usnews.com/internati...>

ChatGPT

Examples	Capabilities	Limitations
"Explain quantum computing in simple terms" →	Remembers what user said earlier in the conversation	May occasionally produce harmful instructions or biased content
"Got any creative ideas for a 10 year old's birthday?" →	A loves user to provide follow-up corrections	Limited knowledge of world and events after 2021
"How do I make an HTTP request in Javascript?" →	Trained to decline inappropriate requests	

Why not for
restaurant search?

03

Proposed UI/UX





Discover New Places to Eat!

I am looking for a great Spanish restaurant in NYC. I love jamon stuff and we also enjoy tapas style restaurants. For a date night. Lively place preferred.



Spanish Restaurant

Tapas Style

Lively Ambiance

Date Night

Jamon Dishes

New York City

Example Search Results



- **Socarrat Paella Bar** (Multiple Locations): Reviews rave about their authentic paellas and a huge selection of both classic and creative tapas. Many mention the lively atmosphere, fueled by flamenco performances and sangria.



Socarrat Paella Bar NYC

Featured review:

5/5 Stars | Olivia: "The paella was absolutely incredible - the perfect amount of socarrat (the crispy rice at the bottom). And the live music made for such a fun atmosphere, perfect for our date night!"



- **El Quinto Pino**: Tapas lovers swoon over the innovative takes on traditional dishes at El Quinto Pino. Reviews consistently mention the cozy-yet-lively atmosphere created with dim lighting and upbeat Spanish music.



El Quinto Pino NYC

Featured Review:

5/5 Stars | Isabella: "My new favorite spot! Every single bite of tapas was bursting with flavor, and the sangria was on point. Will definitely be back for date night - the ambience was perfect."



Backend

04



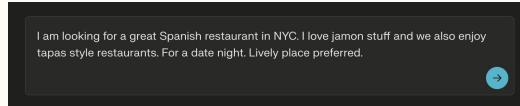
GPT Agent, RAG, and Function Calling



Database Filtering from Natural Language Query

Step 1: Send to GPT4:

1. User's query
2. Database schema
3. Special prompt



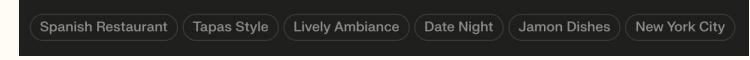
business_id	name	address	city	state	postal_code
:2B_615ENXNUpPnUz7QWA	Great Wraps	3393 Peachtree Rd NE	Atlanta	GA	30326
:QveFHqGtHtECQ9K3fT7Cw	Piece of Cake	3215 Roswell Rd NE	Atlanta	GA	30395
:ThzTqjpb0L-EB0Z1Ph5rEq	First China Restaurant	5295 Buford Hwy NE	Atlanta	GA	30340
:bqfgoJXQwtrWkMy45t9rw	Papi's Cuban & Caribbean Grill	216 Ponce De Leon Ave NE	Atlanta	GA	30308
:yCeINvV4GQQRwodAMPl2g	Nature's Table Bistro	6800 N Terminal Pkwy, Concourse E Contrepoint, Concourse E	Atlanta	GA	30328

```
1  from llama_index import PromptTemplate
2
3
4  instruction_str = """"
5    1. Convert the query to executable Python code using Pandas.
6    2. The final line of code should be a Python expression that can be called with the `eval()` function.
7    3. The code should represent a solution to the query.
8    4. PRINT ONLY THE EXPRESSION.
9    5. Do not quote the expression """
10
11  new_prompt = PromptTemplate(
12      ...
13      You are working with a pandas dataframe in Python.
14      The name of the dataframe is `df`.
15      This is the result of `print(df.head())`:
16      {df_str}
17
18      Follow these instructions:
19      {instruction_str}
20      Query: {query_str}
21
22      Expression: """
23  )
24
25  context = """Purpose: The primary role of this agent is to help to filter a restaurant pandas dataframe
26  based on all the hard filtering criteria identified on the user's query search.
27  Ex: User query: I am looking for a cozy Italian restaurant in NYC.
28  -> Hard criteria: Location: New York City, cuisine: Italian. Cozy is a subjective criteria and not present on the dataset.
29  -> Returns only Pandas query: df.query("Location == 'New York City' & Cuisine == 'Italian'")"""
30
```

Step 2: GPT4 returns to the backend only the **custom pandas code** necessary to perform the **filtering**.

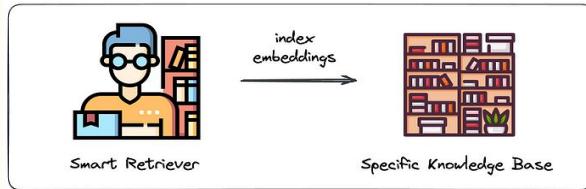


Step 3: Llama Index's **agent** executes the code, **filtering the dataset** to only include Tapas Style Spanish restaurants in NYC, that have Jamon as a menu item.

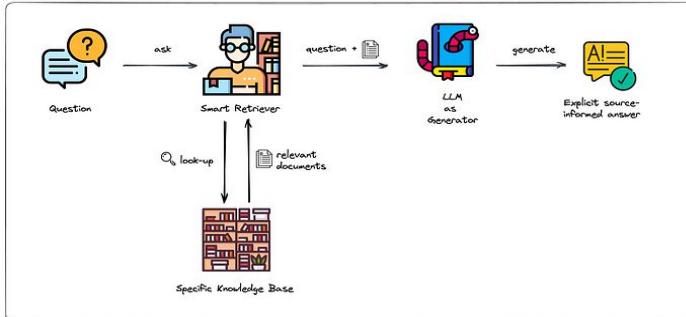


Retrieval Augmented Generation (RAG)

Step 1: Embed and index our entire restaurant **review dataset**.



Step 2: After user sends restaurant **search query**, smart retriever compares it with all **restaurant reviews** to find **similarity score** between them.



Step 3: Our RAG pipeline then sends all the relevant restaurant/review information and rankings back to our GPT4 agent, and he crafts the final response for the user, based on that data.

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Socarrat Paella Bar NYC

Featured review:

5/5 Stars | Olivia: "The paella was absolutely incredible - the perfect amount of socarrat (the crispy rice at the bottom). And the live music made for such a fun atmosphere, perfect for our date night!"

Temporary Dataset - For Proof of Concept



The Yelp dataset is a subset of our businesses, reviews, and user data for use in connection with academic research. Available as JSON files, use it to teach students about databases, to learn NLP, or for sample production data while you learn how to make mobile apps.

The Dataset



6,990,280 reviews



150,346 businesses



200,100 pictures



11 metropolitan areas

908,915 tips by 1,987,897 users

Over 1.2 million business attributes like hours, parking, availability, and ambience
Aggregated check-ins over time for each of the 131,930 businesses

business.json

Contains business data including location data, attributes, and categories.

```
{  
    // string, 22 character unique photo id  
    "photo_id": "..._N_DhLXkrFwKwP9xne9hw",  
  
    // string, 22 character business id, maps to business in business  
    "business_id": "tnhfDvS1l8EaGSXZGiuQgg",  
  
    // string, the business's name  
    "name": "Garaje",  
  
    // string, the full address of the business  
    "address": "475 3rd St",  
  
    // string, the city  
    "city": "San Francisco",  
  
    // string, 2 character state code, if applicable  
    "state": "CA",  
  
    // string, the postal code  
    "postal code": "94107",  
  
    // float, latitude  
    "latitude": 37.7817529521,  
  
    // float, longitude  
    "longitude": -122.39612197,  
  
    // float, star rating, rounded to half-stars  
    "stars": 4.5,  
  
    // integer, number of reviews  
    "review_count": 1198,  
    ...}
```

Yelp Dataset Photos

photo.json

Duplicate of photo.json from the main dataset.

```
{  
    // string, 22 character unique photo id  
    "photo_id": "..._N_DhLXkrFwKwP9xne9hw",  
  
    // string, 22 character business id, maps to business in business  
    "business_id": "tnhfDvS1l8EaGSXZGiuQgg",  
  
    // string, the photo caption, if any  
    "caption": "carne asada fries",  
  
    // string, the category the photo belongs to, if any  
    "label": "food"  
}
```

photos/

Directory containing the photos themselves as "(photo_id).jpg".

review.json

Contains full review text data including the user_id that wrote the review and the business_id the review is written for.

```
{  
    // string, 22 character unique review id  
    "review_id": "...dSx_S06obehz9vW9uAWA",  
  
    // string, 22 character unique user id, maps to the user in user  
    "user_id": "H03Ju77x1rFm-VQRs_8g",  
  
    // string, 22 character business id, maps to business in business  
    "business_id": "tnhfDvS1l8EaGSXZGiuQgg",  
  
    // integer, star rating  
    "stars": 4,  
  
    // string, date formatted YYYY-MM-DD  
    "date": "2016-03-09",  
  
    // string, the review itself  
    "text": "Great place to hang out after work: the prices are decen",  
  
    // integer, number of useful votes received  
    "useful": 0,  
  
    // integer, number of funny votes received  
    "funny": 0,  
  
    // integer, number of cool votes received  
    "cool": 0  
}
```



Thanks!

Do you have any
questions?