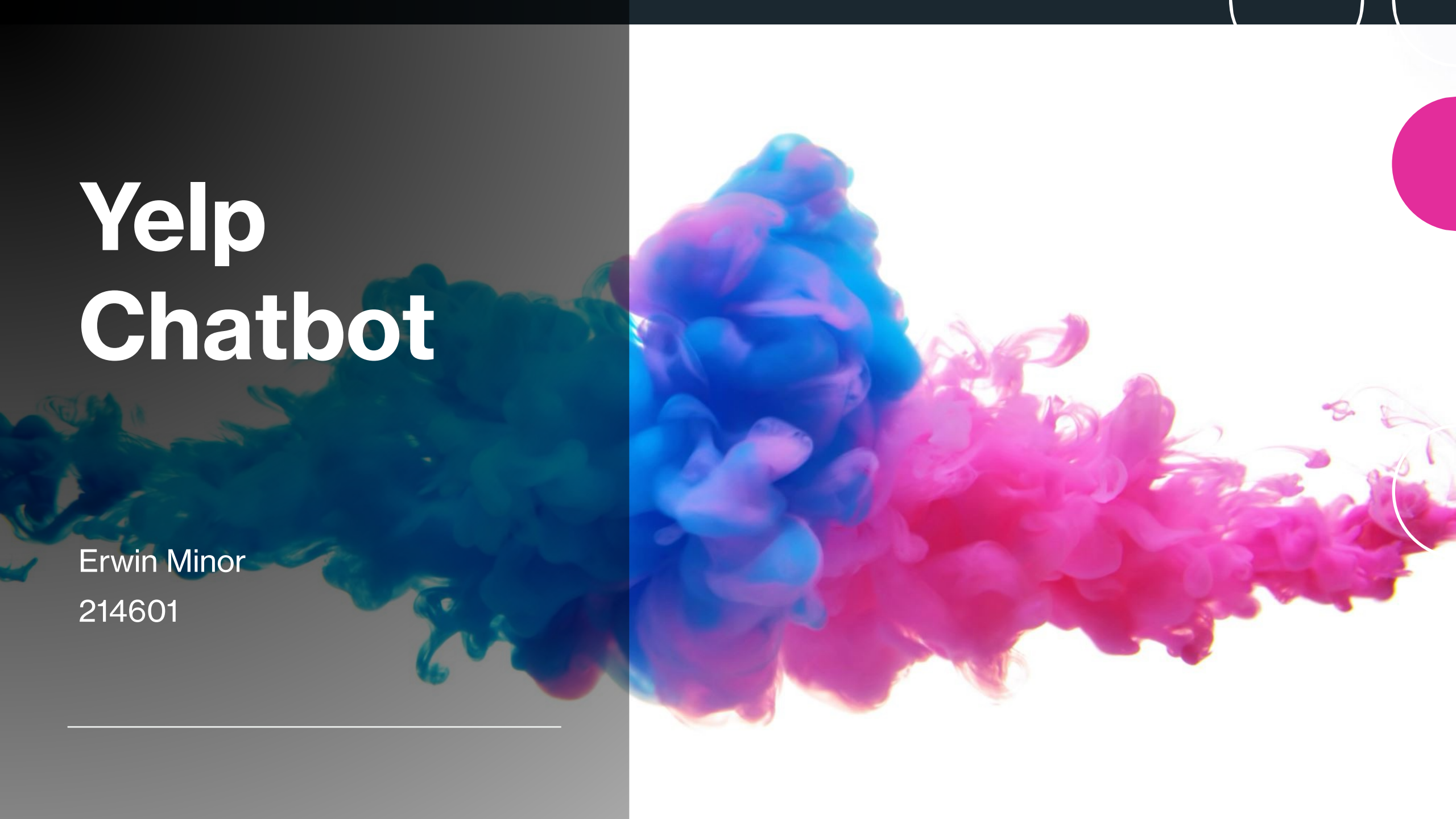


# Yelp Chatbot

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# The type of "Chat with your data" application

- Ask about a business
    - Address
    - Hours
    - Reviews
    - Stars
    - Tip
- 



# Data in the application

- Data from Yelp
- Reviews and information from different businesses in USA
- 3 DataFrames (business, tip, review)
- Focus in a specific state

```
df_business = df_business[(df_business['state'] == 'CA')]
df_business
```

business_id	name	address	city	state	postal_code	latitude	longitude	stars	review_count	is_open	attributes	cate
sfo8kk83dixA6A	Abby Rappoport, LAC, CMQ	1616 Chapala St, Ste 2	Santa Barbara	CA	93101	34.426679	-119.711197	5.0	7	0	{'ByAppointmentOnly': 'True'}	D Tra C Me Na'
QAra9ccqxdFDw	H&M	827-833 State St	Santa Barbara	CA	93101	34.420209	-119.700460	3.0	24	1	{'BusinessAcceptsCreditCards': 'True', 'BikePa...	W Cl Acces Chi
orppqSLdfMhZQ	Helena Avenue Bakery	131 Anacapa St, Ste C	Santa Barbara	CA	93101	34.414445	-119.690672	4.0	389	1	{'RestaurantsTakeOut': 'True', 'NoiseLevel': '...	Resta C B

```
import pandas as pd
df_tip = pd.read_csv('/Users/erwinminor/Desktop/AI/tip.csv')
df_tip
```

	user_id	business_id	text	date	compliment_count
0	AGNUgVwnZUey3gcPCJ76iw	3uLgwr0qeCNMjKenHJwPGQ	Avengers time with the ladies.	2012-05-18 02:17:21	0
1	NBN4MgHP9D3cw--SnaUtkA	QoezRbYQncpRqyrLH6lqjg	They have lots of good deserts and tasty cuban...	2013-02-05 18:35:10	0
2	-copOvidyKh1qr-vzkDEvw	MYoRNLb5chwJQe3c_k37Gg	It's open even when you think it isn't	2013-08-18 00:56:08	0
3	FjMQVZJSqY8syIO-53KFKw	hV-bABTK-gh5wj31ps_Jw	Very decent fried chicken	2017-06-27 23:05:38	0

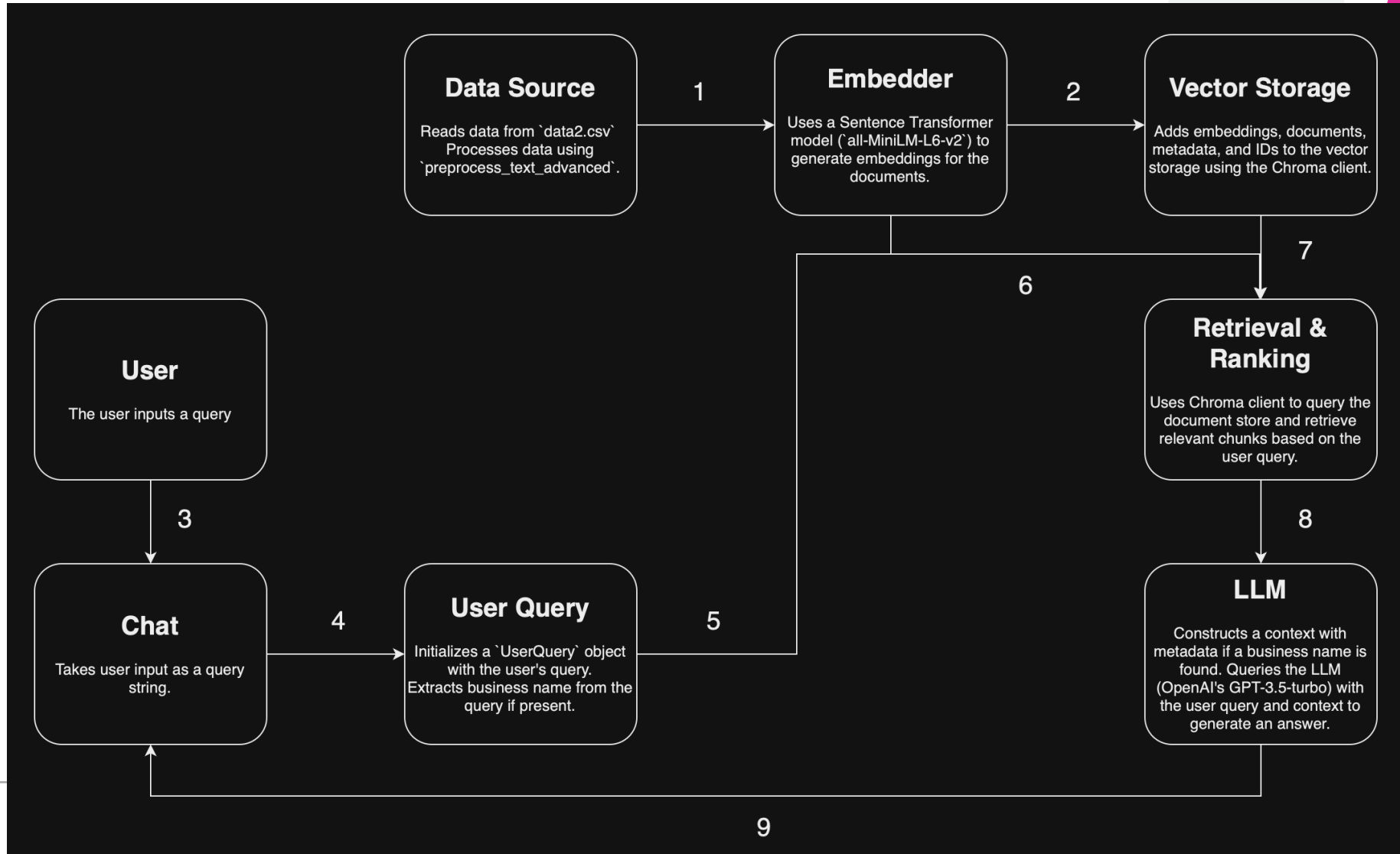
```
import pandas as pd
df_review = pd.read_csv('/Users/erwinminor/Desktop/AI/review.csv')
df_review
```

	review_id	user_id	business_id	stars	useful	funny	cool	text	date
0	KU_O5udG6zpxOg-VcAEodg	mht_-eMZ6K5RLWhZyISBhwA	XQfwVwDr-v0ZS3_CbbE5Xw	3.0	0	0	0	If you decide to eat here, just be aware it is...	2018-07-07 22:09:11
1	BiTunyQ73aT9WBnpR9DZGw	OyoGAe7OKp6SyGZT5g77Q	7ATYjTlgM3jUit4UM3lypQ	5.0	1	0	1	I've taken a lot of spin classes over the year...	2012-01-03 15:28:18
2	saUsX_uimxRICv67Z4Jig	8g_iMtfSiwikVnbP2etR0A	YjUWPPl6HXG530lwP-fb2A	3.0	0	0	0	Family diner. Had the buffet. Eclectic assortim...	2014-02-05 20:30:30
3	AqPFMieE6RsU23_auESxiA	_7bHUI9Uuf5_HHc_Q8guQ	kxX2SOes4o-D3ZQBkiMRfA	5.0	1	0	1	Wow! Yummy, different, delicious. Our favo...	2015-01-04 00:01:03

# Processed data

	business_id	name	address	city	state	postal_code	latitude	longitude	review_count	categories	hours	tips	reviews	stars
84972	Fqu9rcO01satJfng4ODy_g	Glenmorgan Bar & Grill	593 E Lancaster Ave	St. Davids	PA	19087	40.040922	-75.366226	78	American (Traditional), Restaurants, Bars, Ame...	{ 'Monday': '12:0-21:0', 'Tuesday': '12:0-21:0'...	I love their happy hour-- half-priced drinks an...	if you haven't had a lobster roll in the area ...	3.197674
80521	kOmks5yAqasJbtpfBptcQ	The Gellman Team	2203 S Big Bend Blvd	Saint Louis	MO	63117	38.620113	-90.321901	9	Home Services, Real Estate Services, Real Esta...	{ 'Monday': '0:0-0:0', 'Tuesday': '0:0-0:0', 'W...	NaN	Neil Gellman got our home sold and masterfully...	4.555556
73434	kLfkz8Rj74XB67w06iV-7Q	7-Eleven	5457 E Pima St	Tucson	AZ	85712	32.243854	-110.875846	6	Food, Coffee & Tea, Grocery, Convenience Stores	{ 'Monday': '0:0-0:0', 'Tuesday': '0:0-0:0', 'W...	NaN	Great spot , friendly employees , easy ingress...	2.166667
34555	oFxKFidKp_IGaFAzvnzZfA	Corner Bistro	4993 Loughborough Ave	Saint Louis	MO	63109	38.571832	-90.287621	224	Restaurants, Italian, Bistros, American (New),...	{ 'Monday': '16:0-22:0', 'Tuesday': '16:0-22:0'...	That's the best burger I've ever had! Get the ...	One of our favorite restaurants and locally. I...	4.709957
31266	_CfOGOGryKczkDS7JluT0A	Beauty Depot	3120 E Hillsborough Ave	Tampa	FL	33610	27.996464	-82.425077	11	Shopping, Cosmetics & Beauty Supply, Beauty & ...	{ 'Monday': '8:30-20:30', 'Tuesday': '8:30-20:3...	NaN	I give this store 2 stars, I would have given ...	2.909091
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
40930	U-RftQot8VGINqQvxLjV2A	Simply Art Studios	4022 Tampa Rd, Ste 5	Oldsmar	FL	34677	28.035068	-82.654840	6	Event Planning & Services, Education, Art Scho...	{ 'Tuesday': '12:0-19:0', 'Wednesday': '12:0-19...	NaN	Simply Art is a new art studio in north Pinell...	4.500000
83325	INvhTTJE8V5pKKnGCMd0iw	Christina Kantrud - State Farm Insurance Agent	1665 Lakeside Dr, Ste 101	Reno	NV	89509	39.507602	-119.807564	10	Financial Services, Insurance, Home & Rental I...	{ 'Monday': '9:0-17:30', 'Tuesday': '9:0-17:30'...	Awesome people work here! Awesome service!	I worked with Alexandria McKay. She was super ...	4.200000

# Diagram



# Chroma Document Store

Chroma is an open source vector database capable of storing collections of documents along with their metadata, creating embeddings for documents and queries, and searching the collections filtering by document metadata or content. Additionally, Chroma supports multi-modal embedding functions.

Steps:

1. Initialization of the Chroma Client
2. Collection Management
3. Preparation of Documents, IDs, and Metadata
4. Generation of Embeddings
5. Storage in the Document Store



**Chroma**

# Result

Try

main(data\_source, document\_store)

Enter your query (or type 'exit' to quit): What is the address of "Glenmorgan Bar & Grill"?  
User Query: What is the address of "Glenmorgan Bar & Grill"?  
Answer: The address of "Glenmorgan Bar & Grill" is 593 E Lancaster Ave, St. Davids, PA 19087.

Enter your query (or type 'exit' to quit): Tell me the categories of "The Gellman Team"  
User Query: Tell me the categories of "The Gellman Team"  
Answer: The categories of "The Gellman Team" are Home Services, Real Estate Services, Real Estate, Real Estate Agents.

Enter your query (or type 'exit' to quit): What are the hours of "Corner Bistro"?  
User Query: What are the hours of "Corner Bistro"?  
Answer: The hours of "Corner Bistro" are as follows:  
- Monday: 4:00 PM to 10:00 PM  
- Tuesday: 4:00 PM to 10:00 PM  
- Wednesday: 4:00 PM to 10:00 PM  
- Thursday: 4:00 PM to 10:00 PM  
- Friday: 4:00 PM to 10:00 PM  
- Saturday: 4:00 PM to 10:00 PM

Enter your query (or type 'exit' to quit):

Print data for queries

df

	business_id	name	address	city	state	postal_code	latitude	longitude	review_count	categories	hours	tips	reviews	stars
84972	Fqu9rcO01satJfng4ODy_g	Glenmorgan Bar & Grill	593 E Lancaster Ave	St. Davids	PA	19087	40.040922	-75.366226	78	American (Traditional), Restaurants, Bars, Ame...	{'Monday': '12:0-21:0', 'Tuesday': '12:0-21:0'...	I love their happy hour--half-priced drinks an...	if you haven't had a lobster roll in the area ...	3.197674
80521	kOmks5yAqasJbtpfBptcQ	The Gellman Team	2203 S Big Bend Blvd	Saint Louis	MO	63117	38.620113	-90.321901	9	Home Services, Real Estate Services, Real Esta...	{'Monday': '0:0-0:0', 'Tuesday': '0:0-0:0', 'W...	NaN	Neil Gellman got our home sold and masterfully...	4.555556
73434	kLfKz8Rj74XB67w06iV-7Q	7-Eleven	5457 E Pima St	Tucson	AZ	85712	32.243854	-110.875846	6	Food, Coffee & Tea, Grocery, Convenience Stores	{'Monday': '0:0-0:0', 'Tuesday': '0:0-0:0', 'W...	NaN	Great spot , friendly employees , easy ingress...	2.166667
34555	oFxKFidkP_IGaFAzvNZfA	Corner Bistro	4993 Loughborough Ave	Saint Louis	MO	63109	38.571832	-90.287621	224	Restaurants, Italian, Bistros, American (New),...	{'Monday': '16:0-22:0', 'Tuesday': '16:0-22:0'...	That's the best burger I've ever had! Get the ...	One of our favorite restaurants and locally. I...	4.709957

**Thank you!**

