Knowledge-based Fragrance Recommendation System

MSDS 459 FALL 2023

Archit Agarwal, Yue Yang

Table of Contents

0. Background Why Choosing Perfume is Hard?

- <u>Different scent groups</u>

butterflyhousesoaps.co

Why Choosing Perfume is Hard?

- <u>Different scent groups</u>
- <u>Different notes </u>(front, middle, end)

PERFUME PYRAMID

FAST	MEDIUM	SLOW

Fragrance Volatility

Duration

Head Notes — 🕐 5 – 15 min.

Heart Notes — 🕐 20 – 60 min.

Base Notes — 🕐 > 6 hrs.

hofmannmkt.co

Why Choosing Perfume is Hard?

- <u>Different scent groups</u>

- <u>Different notes</u>

- <u>Different versions</u> (names)

<u>Choosing a fragrance – 3 reasons why it's difficult.</u>

Why Choosing Perfume is Hard?

- Different scent groups
- Different notes
- Different versions
- Different longevity (names : EDP, EDT...)

OVERVIEW OF FRAGRANCE LONGEVITY

TYPE

Perfume (Parfum)	Eau de Parfum (EDP)	Eau de Toilette (EDT)	Eau de Cologne (EDC)	Eau Fraiche

CONCENTRATION

15-40%	15-20%	5-15%	2-4%	1-3%

LONGEVITY

6-8 hours	5-6 hours	4-5 hours	2-3 hours	1-2 hours

misiuacademy.com

Why Choosing Perfume is Hard?

- Different scent groups
- Different notes
- Different versions
- Different longevity
- Different brands

THE COMPANIES THAT OWN THE MAJORITY OF FRAGRANCE BRANDS ON THE PLANET

FragranceX

fragrancex.co

Why Choosing Perfume is Hard?

- <u>Different scent groups</u>

- <u>Different notes</u>

- <u>Different versions</u>

- <u>Different longevity</u>

- Different brands

- …. Personality! (comments: people's

redbookmag.com

- # GOAL

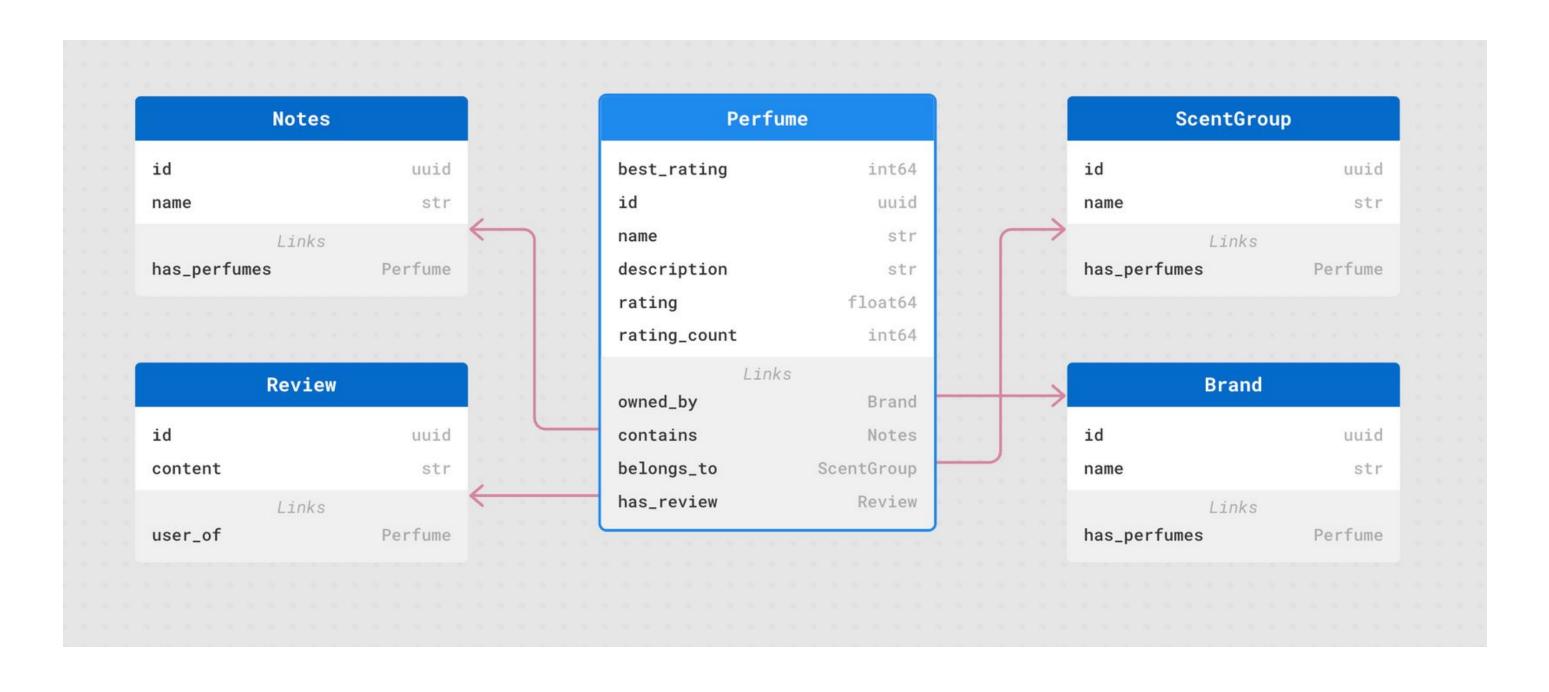 With a Recommendation Engine built on Knowledge Graph, we can:
  - Unify diverse information.
  - Provide personalized & contextually relevant suggestions.
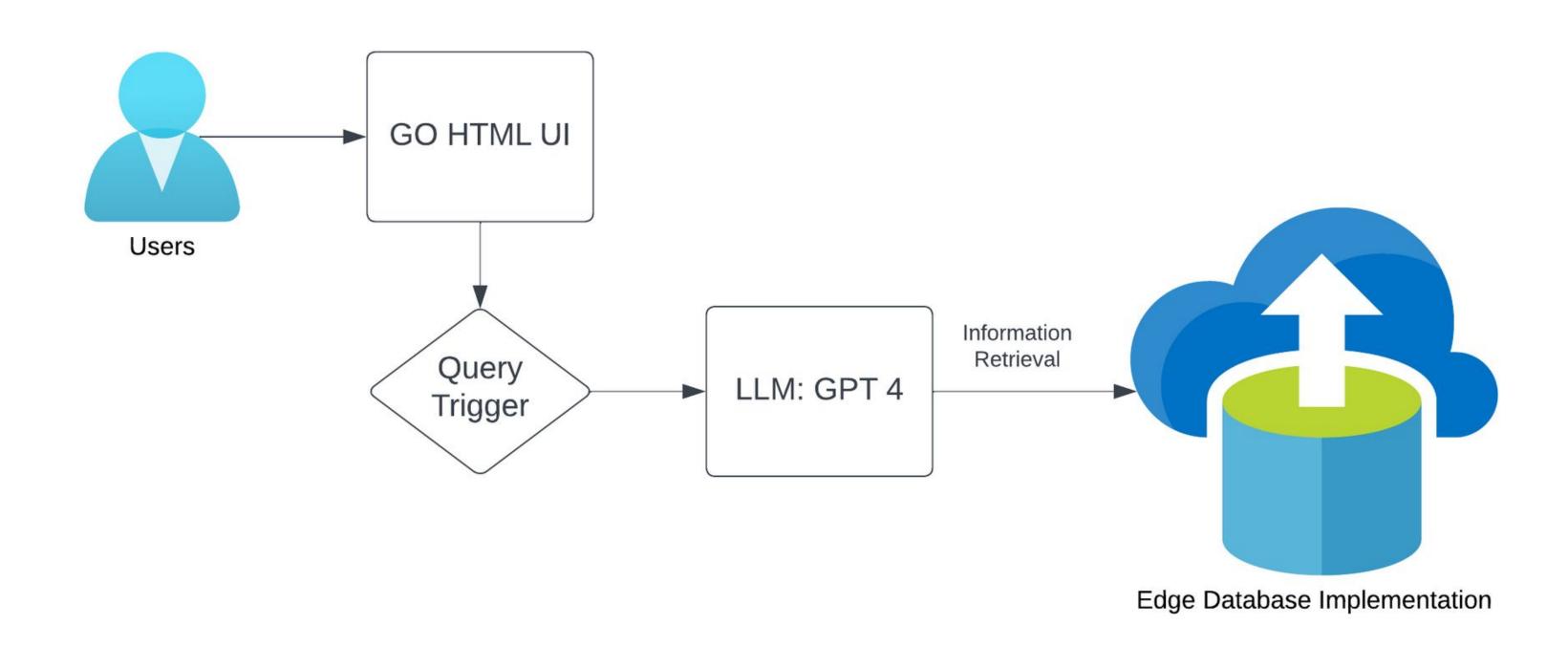
2.Data Sources

C for confetti

D for a drumroll

M for mic drop

O for bubbles

Q for quiet

U for unveil

Any number from 0-9 for a timer

3.Data Schema
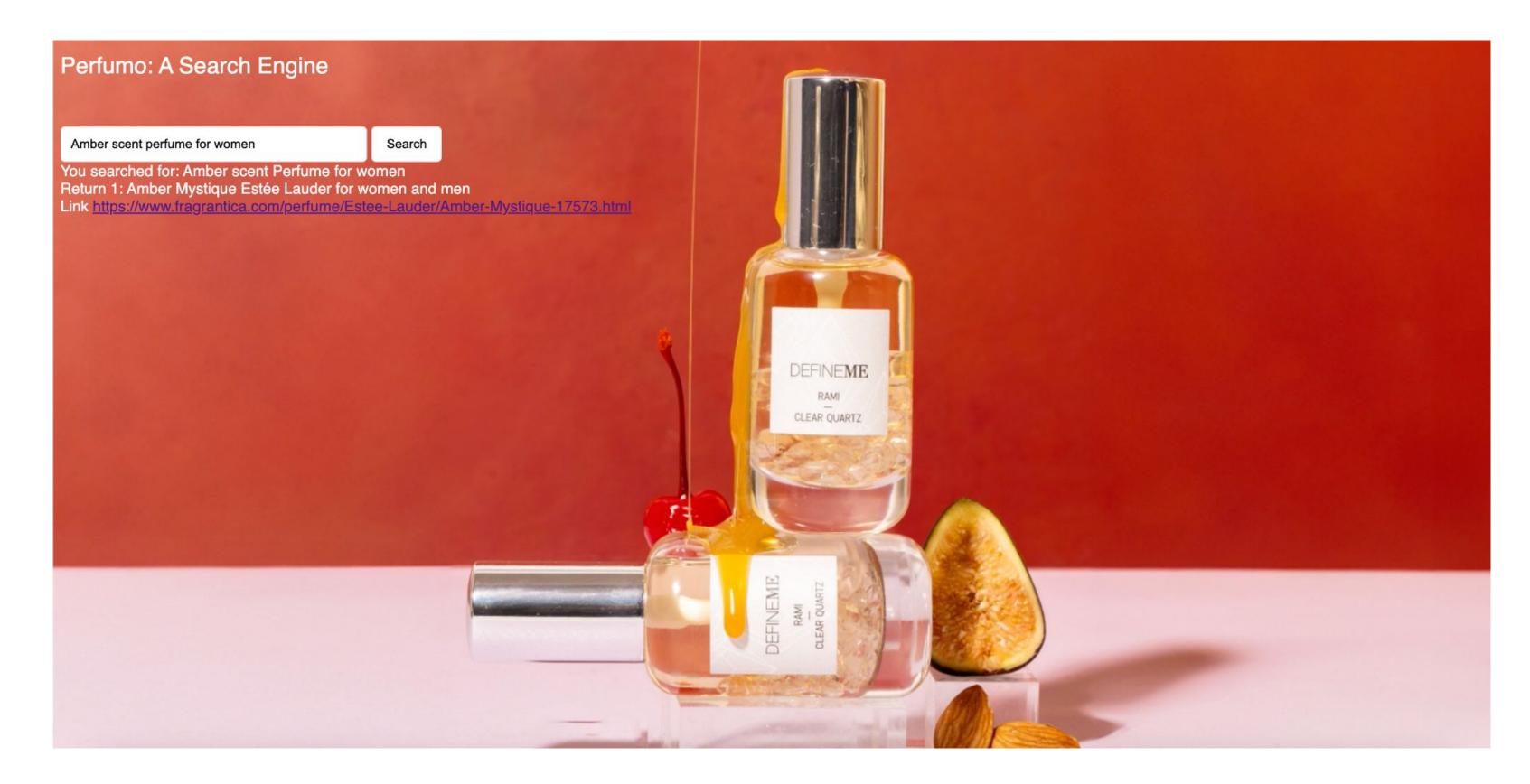
Knowledge Graph Schema in EdgeDB

4.Application Framework

Core functionality

- search box : for natural language query description such as "chill and feminine"
- search results : returning perfumes that matches the required qualities

5. Result

Perfumo: A Search Engine

Amber scent perfume for women   Search

You searched for: Amber scent Perfume for women
Return 1: Amber Mystique Estée Lauder for women and men
Link https://www.fragrantica.com/perfume/Estee-Lauder/Amber-Mystique-17573.html

6. Demo

Link to Vimeo Video: https://vimeo.com/890917875?share=copy