TotallyMakeScents

A Novel Perfume Recommender

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Overview

A NOVEL PERFUME RECOMMENDER

https://totallymakescents.streamlit.app/

The strengths of our product:

- Accepts new users
- Handles negative opinions
- Warns about allergy risks
- Adjusts with sliders
- Takes unlimited entries

TotallyMakeScents

What's it smell like in the rain, at the end of a hiking trail full of blossoms? What fragrance would a wizard wear in a magical world? Looking for a bittersweet scent for a farewell party. Tell us about your stroy, and we MAKESCENTS.

You like these perfumes: ?

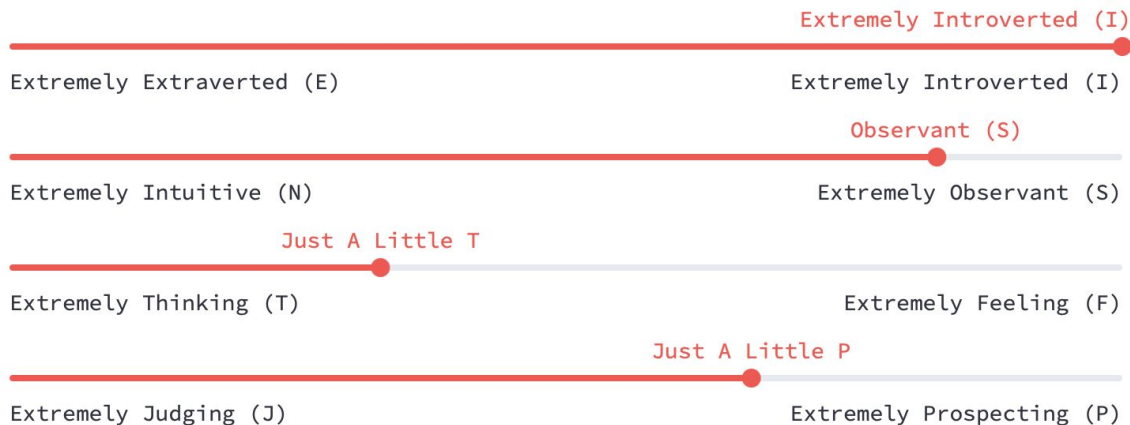| Neroli Portofino × | Noir de Noir × | Costa Azzurra Pa... × | Mandarino di A... × | ⊗ ⌄ |

You avoid these perfumes   ?   ◯ You have allergy to one or more of these.

| Tobacco Oud × | ⊗ ⌄ |

Your MBTI   ?

Extremely Introverted (I)

Extremely Extraverted (E)   Extremely Introverted (I)

Observant (S)

Extremely Intuitive (N)   Extremely Observant (S)

Just A Little T

Extremely Thinking (T)   Extremely Feeling (F)

Just A Little P

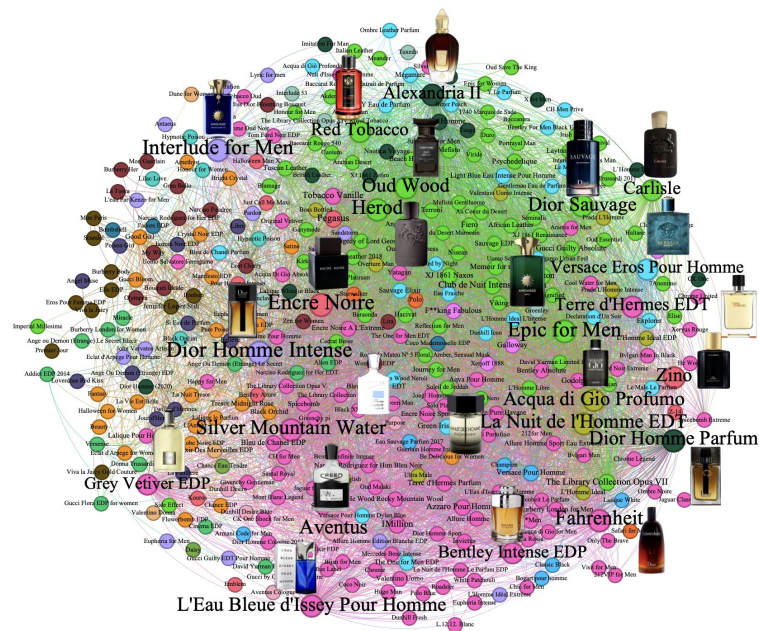Extremely Judging (J)   Extremely Prospecting (P)

Totally Make Scents!

Datasets

Collaborative Filtering

Content-Based Filtering

Top Notes

Bergamot   Mandarin Orange   Lemon   Bitter Orange   Lavender   Rosemary   Myrtle

Middle Notes

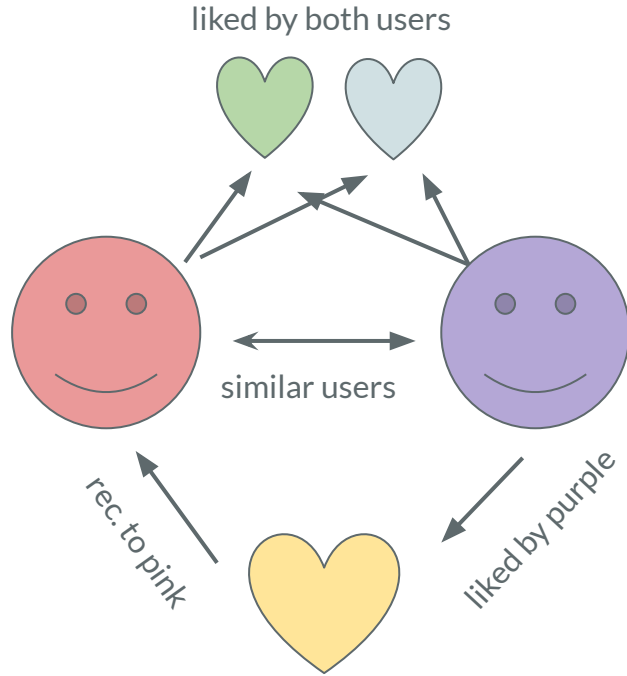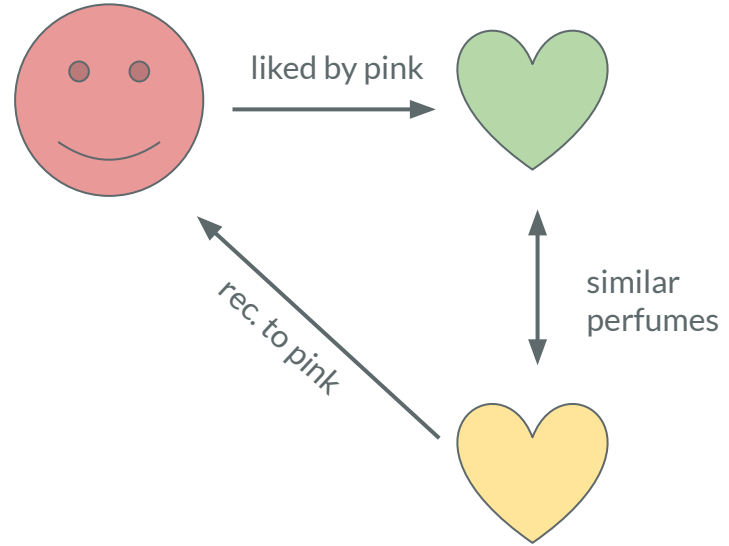African Orange Flower   Neroli   Jasmine   Pitosporum

Base Notes

Amber   Angelica   Ambrette (Musk Mallow)

https://www.kaggle.com/datasets/olgagmiufana1/
fragrantica-com-fragrance-dataset

Modeling Approach

liked by both users

similar users

rec. to pink

liked by purple

Collaborative Filtering

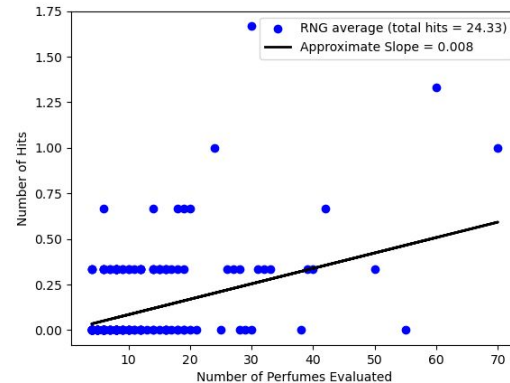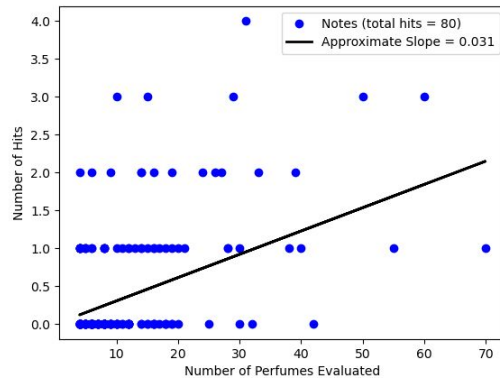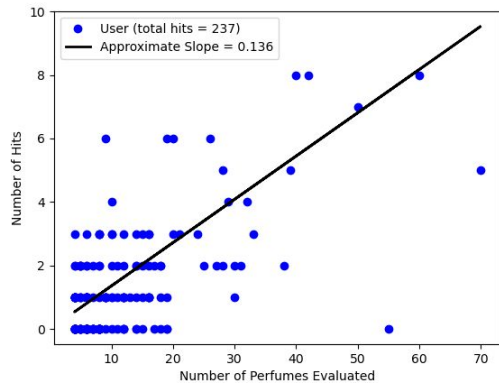liked by pink

similar perfumes

rec. to pink

Content Based

Testing the Models: Data Split

- Divide our data into 80% training, 20% testing
- Validation set: 30% of users who evaluated 10+ perfumes
- For each user in validation set:
  - 50% of ratings used to run models
  - 50% of ratings used to evaluate models

Testing the Models: Hit Test

Future Plans

- Improve the content-based model
  - Classify the notes and/or reduce the dimensionality with PCA/Autoencoders
- Improve the user-based model
  - Save and utilize the customer entries and preferences for future recommendations
- Develop recommendations from user queries
  - What's it smell like in the rain, at the end of a hiking trail full of blossoms?
  - What fragrance would a wizard wear in a magical world?
  - Looking for a bittersweet scent for a farewell party.

Stay tuned as we MakeScents!