MULTIPLE TAGS-BASED RECOMMENDATION SYSTEM (WITH CONTEXT)

INTRODUCTION

Multiple Tags-Based Recommenders with context-aware tags

- Leverages the power of a combination of tags.
- Analyze how a set of tags co-occurs with items.
- Recommends items that share similar tag profiles with items the user has interacted with.

OBJECTIVE

- Showcasing a novel approach that integrates a combination of users, tags, and Items for more personalized recommendations, driving superior user engagement and satisfaction.
- Considering current social media trends, gen-z slang, and the sheer laziness around us, it is important for the tags and recommenders together to be context-aware, too.

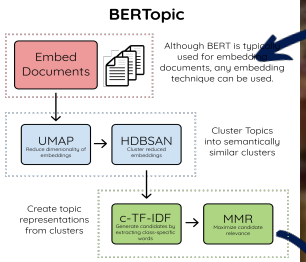
APPLICATIONS

- E-commerce
- Streaming Services
- Social Media
- Academic Research
- E-learning Platforms
- Healthcare
- News/Article Recommendations

APPROACHES

So we have compared approaches to focus on the semantics:

- Transformer-based clustering (For being Gen-z friendly and context-aware)
- NetworkX (For a more traditional graph-based approach)
- A few more common ones like Word2Vec and TF-IDF.



INSPIRATION

What better can be than an inspiration taken from everyday life?

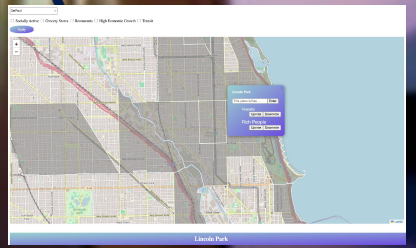
- Recommender systems are such an integral part of our daily routine. Whether it is social media, e-commerce, or even medicine! There is a constant effort to make them better.
- Additionally, as broke international students 🥺, we decided to showcase our idea by using the example of a student just moving into Chicago and looking for suitable neighborhoods.
- Thirdly, respecting the mission of this Hackathon to contribute towards the growth of Chicago, we make the idea city-specific..

EXPECTATIONS & LIMITATIONS

- Time Constraints: A lot of time will be spent on fine-tuning the Generative-AI model.
- Dataset Availability: Since we do not currently have extensive community tagging for Chicago Neighborhoods, we have used an available dataset.

USER INTERFACE

- For the Chicago neighborhood tagging, we have chosen a map-based community tagging interface for a few popular universities nearby.
- You could tag literally anything,. Let's say – LaSalle Street has great dating opportunities!



AUTHORS

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Vaishnavi Shankar
Bandhsavi Parvathaneni
Abhishek Jaiswal