Keyword Processing

Users review Restaurants

R_1
R_2
R_3
R_4
R_5
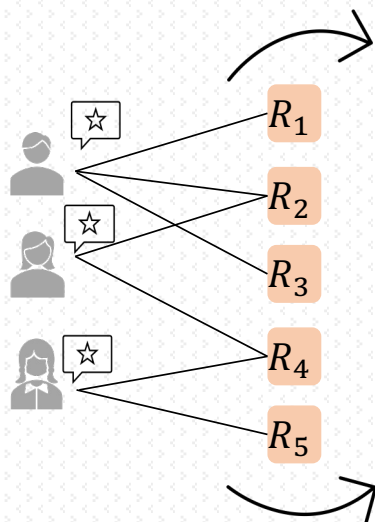
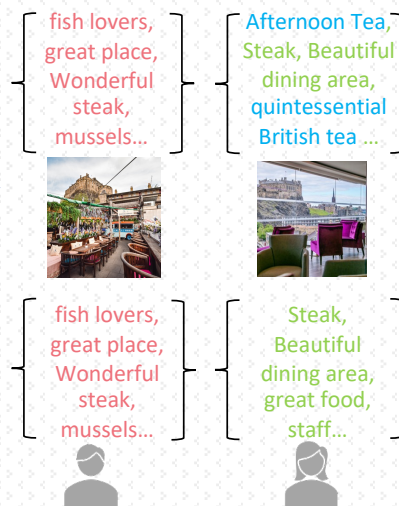**Key words extraction**

User1's review for R3: Good spot to get great food. Beautiful dining area and exceptional staff. Dumplings and steak, which was perfectly cooked to order.

User5's review for R3: I can't imagine a more perfect spot for Afternoon Tea. This is the quintessential British tea experience set inside of the beautiful place. Absolutely impressive!

User3's review for R9: Wonderful steak, wonderful mussels, great value! A great place for meat lovers like me - I highly recommend. Ess
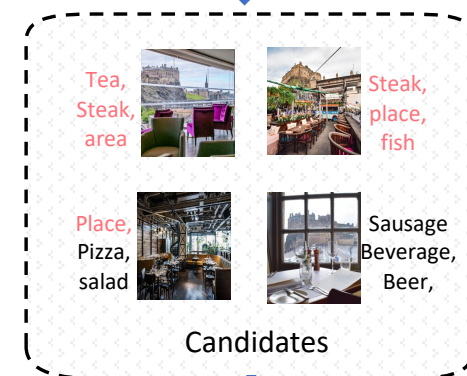
Key words represent for users & restaurants

fish lovers, great place, Wonderful steak, mussels…

Afternoon Tea, Steak, Beautiful dining area, quintessential British tea …

fish lovers, great place, Wonderful steak, mussels…

Steak, Beautiful dining area, great food, staff…

Cold-start User

I like "steak, tea, place"

Retrieval model

Candidates

Tea, Steak, area

Steak, place, fish

Place, Pizza, salad

Sausage Beverage, Beer,

Reranked Candidates

① ② ③ ④

LLMs as Ranker

Gemini

User mention when wanting to choose restaurants: {Steak, Tea}.
The candidate restaurant are: {R1, R2, R3, R4}
Keywords associated with candidate restaurants: {R1: {,…},…}.
Output: Ranked most suitable restaurants in the candidate set.

Prompt