



# Fantastic Feasts

## and where to find them

Galvanize capstone project

Amrita Haldar  
(In partnership with Feastly)

Github: [github.com/ahaldar42](https://github.com/ahaldar42)

LinkedIn: [linkedin.com/in/amritahaldar](https://linkedin.com/in/amritahaldar)

[amrita.haldar@gmail.com](mailto:amrita.haldar@gmail.com)



# Introduction



Find a Pop-Up

Unique meals hosted city-wide



Find a Chef

Hear their story and enjoy their food



Share a Table

Connect with new folks

*“Dining with one’s friends and beloved family is certainly one of life’s primal and most innocent delights, one that is both soul-satisfying and eternal.”*

*Julia Child*



FEASTLY

# Mission

## Meal recommender system for users

The image displays a grid of six cards, each representing a different meal recommendation:

- Pinoy Heritage: 8 course spring tasting menu** (\$55) at **SOMA, SAN FRANCISCO**. Hosted by **FRANCIS A.** (5 stars, 824 reviews). Sat, May 12 6:00 PM. Seats left: 1.
- Thali Supper Club: Indo Sri Lankan** (\$70) at **CENTRAL EASTSIDE, PORTL...**. Hosted by **LEENA E.** (5 stars, 28 reviews). Sat, May 12 6:30 PM.
- Istanbul Modern, Spring (10 course)** (\$65) at **RUSSIAN HILL, SAN FRANCISCO**. Hosted by **LAURA & SAY...** (5 stars, 3990 reviews). Sat, May 12 7:00 PM. Waitlist only.
- ICHIDO Japanese Omakase** (\$85) at **SOMA, SAN FRANCISCO**. Hosted by **GEOFFREY R.** (5 stars, 4996 reviews). Sat, May 12 7:00 PM.
- Filipino + Saké Dinner** (\$59) at **INNER SOUTHEAST, PORTL...**. Hosted by **MELVIN T.** (5 stars, 1114 reviews). Sat, May 12 7:00 PM. Seats left: 2.
- Mar y Tierra** (\$75) at **NOB HILL, SAN FRANCISCO**. Hosted by **RODRIGO F.** (5 stars, 200 reviews). Sat, May 12 7:00 PM.

# Exploratory Data Analysis

~ 130,000 users

~ 14,000 meals

~ 10,000 locations

~ 10,000 menus

~ Multi-city

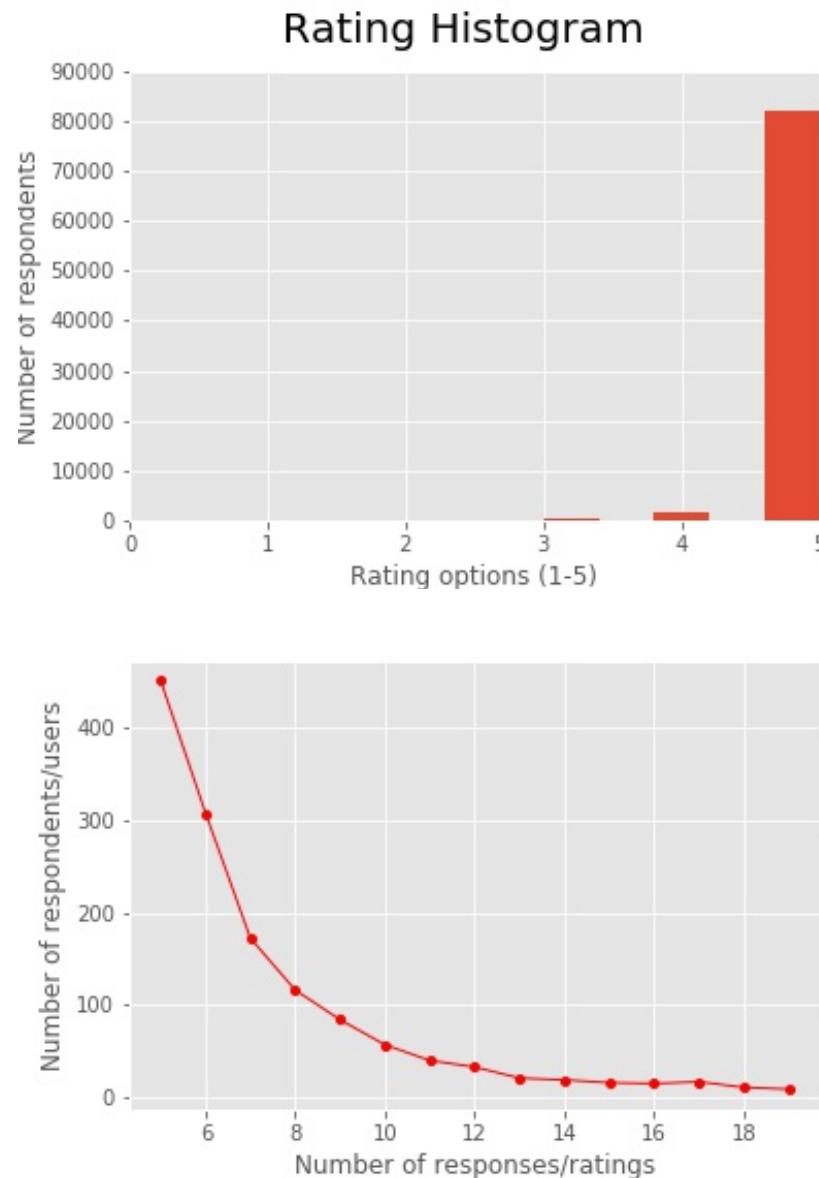
## 18 data tables with more than 60 features

- Menu Table
- Meal Table
- User Table
- User Taste Profile
- Meal Ticket Table
- Meal Dish Table
- Purchase table
- Review table

# Exploratory Data Analysis

## Review Table

Id  
Meal Id  
User Id  
Meal Ambiance  
Meal Hospitality  
Meal Preparedness  
Meal Price  
Meal Recommended  
Overall Rating  
Cook Review  
Feastly Review  
Private Review



# User-user similarity collaborative recommender system

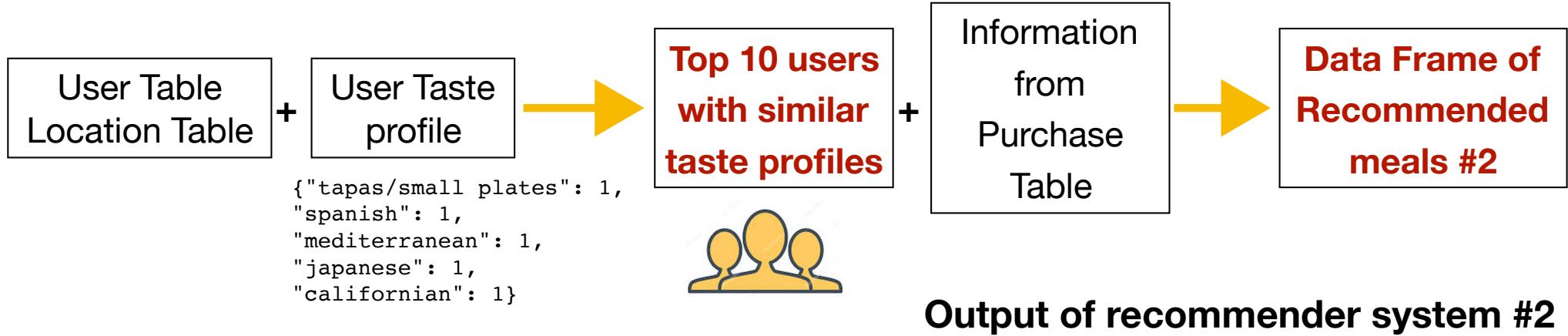
Select 5 or more cuisines to get personalized recommendations on Feastly.



**Input : User Id**

**Find similar users using taste profiles**

- Created similarity matrix from *custom\_cuisine\_rating*
- Similarity metric - **Jaccard score**
- Sort to find the top 10 similar users

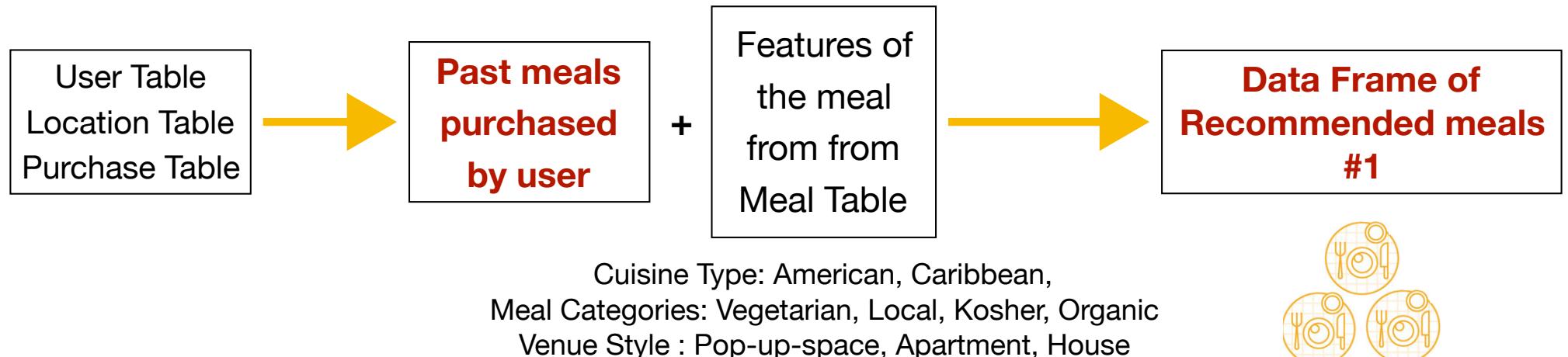


# Item-Item similarity content based recommender system

**Input : User id**

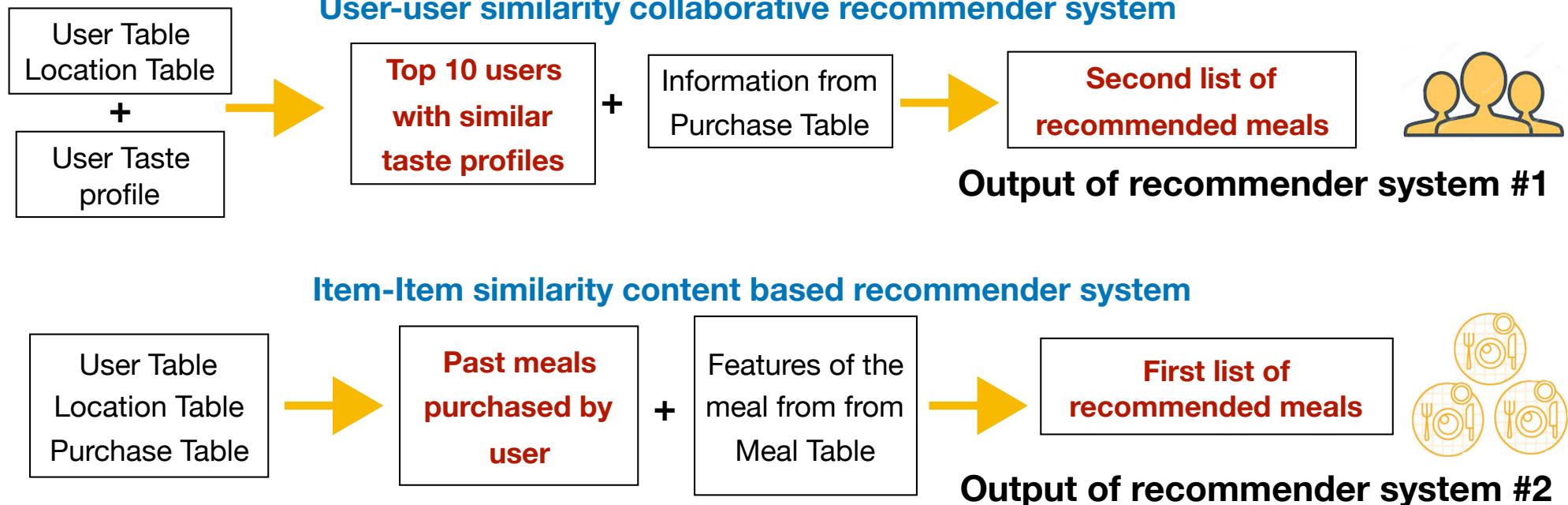
**Find similar meals using previous purchases**

- ‘Venue style’, ‘Menu style’, ‘cuisine type’ and ‘meal categories’
- **Count Vectorizer**
- **Cosine similarity**
- Sort to find the top similar meals

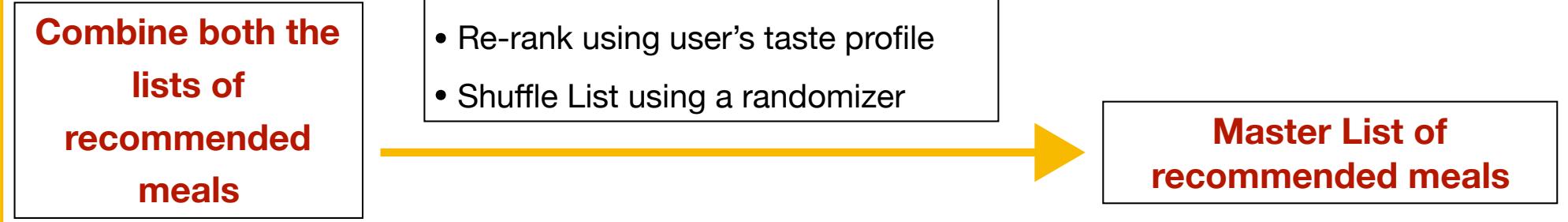


**Output of recommender system #1**

# Pipeline



## Final Result of recommender system





# Output Example

## Meals of new user

Event Title	Venue Style	Menu Style	Cuisine Type	Meal Categories
Why We Give: Wine & Cheese	house	not-defined	american;vegetarian	Local

## Master Recommendation List

Event Title	Venue Style	Menu Style	Cuisine Type	Meal Categories
This is not your Bubbie's Seder!	house	notdefined	american jewish vegetarian	nan
Thanks-giving it's Shabbat!	house	notdefined	american	local
A BuzzFeed Shabbat Dinner	house	notdefined	american	local,organic
Spring Into The Garden	house	notdefined	vegetarian	local,organic
A Vegetarians Paradise	apartment	notdefined	american caribbean vegetarian	local,vegetarian
Summer Farm to Table Pt. 2	apartment	notdefined	american	local,organic,vegetarian
Julie's Shabbat Kallah	house	notdefined	vegetarian	vegetarian
Summer Farm To Table Dinner + Wine Pairing	apartment	notdefined	american	local,organic,vegetarian
Pumpkin Challah	house	notdefined	american	kosher,local,organic
Pickling Workshop	popupspace	notdefined	american	kosher,local,organic,vegetarian



# Thank you



- I would like to thank Joey DeBruin and Anthony Ventre at Feastly for giving me this exciting opportunity
  - I would also like to thank our awesome instructors: Moses Marsh, Mark, Chyld and Ivan

Github: [github.com/ahaldar42](https://github.com/ahaldar42)

LinkedIn: [linkedin.com/in/amritahaldar](https://www.linkedin.com/in/amritahaldar)  
[amrita.haldar@gmail.com](mailto:amrita.haldar@gmail.com)



# Word Cloud of Reviews

## happy feasters :)