

Minimizing food waste



MOTIVATION



Food wastes

Have decent meal while using ingredients that needs to be gone



"The average college student generate 142 pounds of food waste a year, according to Recycling Works, a program in Massachusetts."
-NPR.org





RECIPE DATASET

- **❖ Name**
- Estimated time to cook
- **❖ID** of the recipe
- List of ingredients
- **&** Etc

INTERACTION DATASET

- **User ID**
- ❖ Recipe ID
- * Rating of recipe give by a user
- ❖ Description/comment of the recipe

made by the reviewer



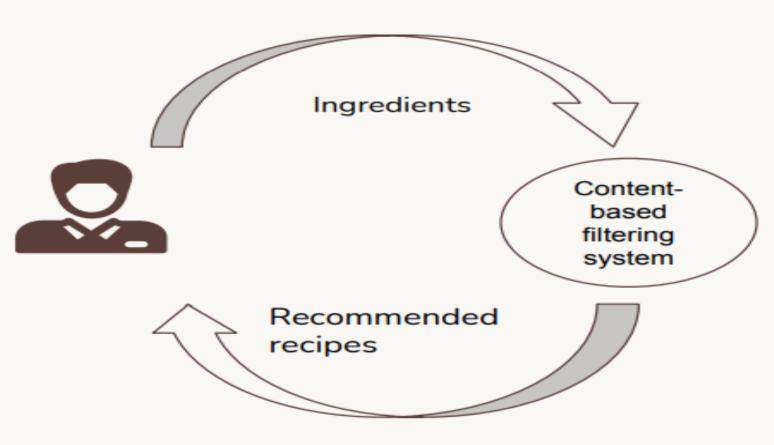
CONTENT BASED FILTERING SYSTEM

 Comparing similarities between recipes using list of ingredients

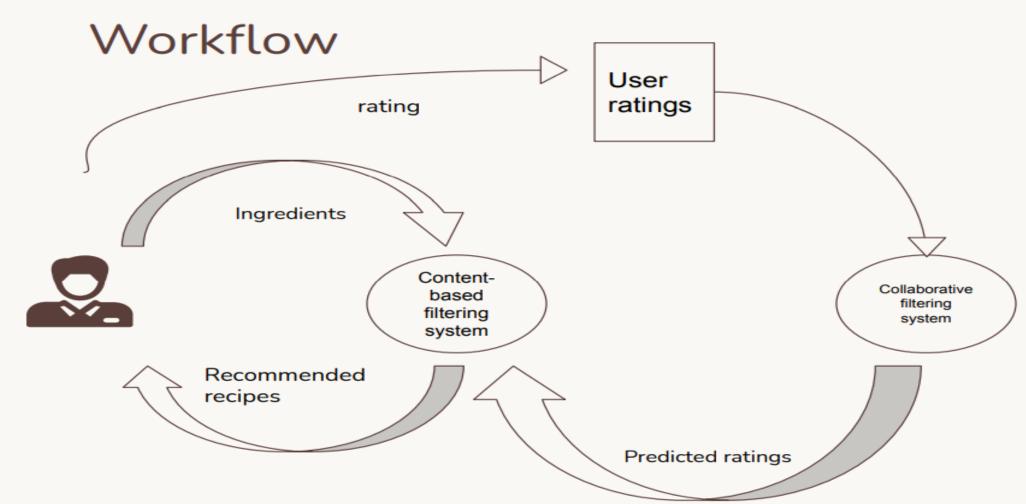
COLLABORATIVE FILTERING SYSTEM

 Predicting user preference using other users' interaction with recipes









Results

Example input ingredients

- Chicken breast, eggs, bacon, pepper, salt, lettuce, onion, garlic

Recommended recipe

Zucchini squash and bacon saut

40 minutes

Ingredients:

- Zucchini
- Bacon
- Onion
- Tomatoes
- Garlic
- Salt & pepper

Steps:

- cut bacon into approximately 1-inch size pieces and fry until crisp
- add chopped onion and saut for a few minutes to lightly brown
- add sliced zucchini, minced garlic, salt, pepper and stir
- cover and lower heat
- simmer on low heat, stirring occasionally until squash gets soft
- ✓add quartered tomatoes and simmer for 5-10 minutes more



Implementing image recognition to automate ingredient input

Utilizing more data for the recommendation

Cooking time, recipe description tags, and nutritions informations

Implement substitution ingredients to further decrease the food waste

Scape image of food made from the recipe to show user

THANK YOU

- DORIA SHARMA
- KRUNAL SONI
- SAMBRIT