Recipe Discovery System

Group 4 :
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Idea

unhealthy pasta

GPS

Google Maps

Query

Cuisine Suggestion

Recipe Suggestions

Recipes:
Super healthy alternative
Quite healthy alternative
Another healthy alternative
…

Recipes DB

Data Gathering

Scrapy

BeautifulSoup

SelectorGadget

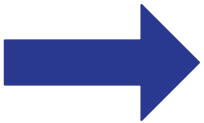
+

BBC goodfood

BBC FOOD

+

kaggle



mongoDB.

Data Cleaning

BBC FOOD

Recipe data

```
{ name : "Minestrone",
  Ingredients :
   [  "chilli",
      "oil",
      "haricot beans", ... ]
   quantities : [
    { "name" : "oil",
      "unit" : "tbsp",
      "qty" : 4 },
```

Extravagant recipe names:

Perfect cauliflower cheese with bacon and mushrooms

Unstructured ingredients:

450ml / ¾ pint hot turkey or chicken stock

Yummly

Cuisine data

Cuisine - Ingredients

```
{  cuisine : "indian",
   Ingredients :
    [ "tumeric",
      "tomatoes",
      "garam masala",
      "red lentils",
      … ]
}
```

Ingredient - Cuisines

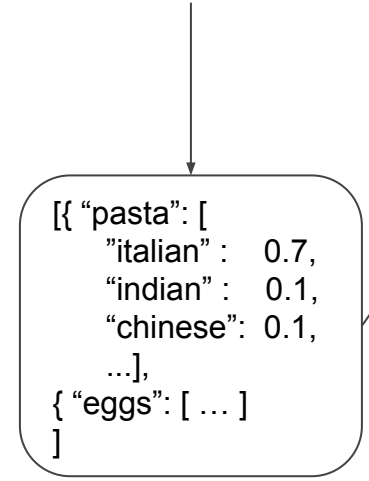
```
{  ingredient: “pasta”
   cuisines:
   [ “Italian”:     0.6,
     “Chinese”: 0.05,
     “Indian”:     0.2,
      … ]
}
```

Data collected

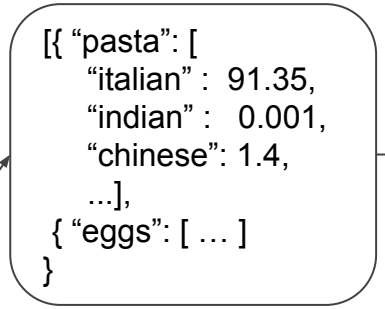
Cuisine information

Cuisine Classification

Carbonara



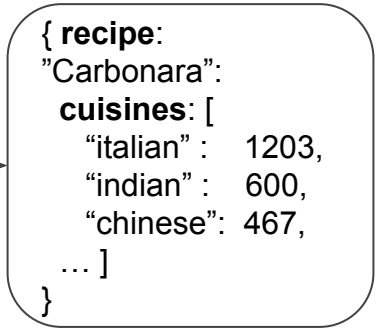
Ingredient prob.

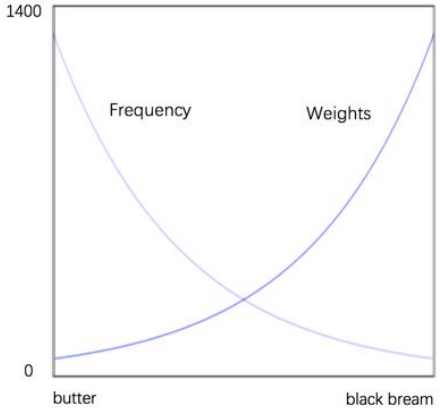


Weighted prob.

Σ

ingredients

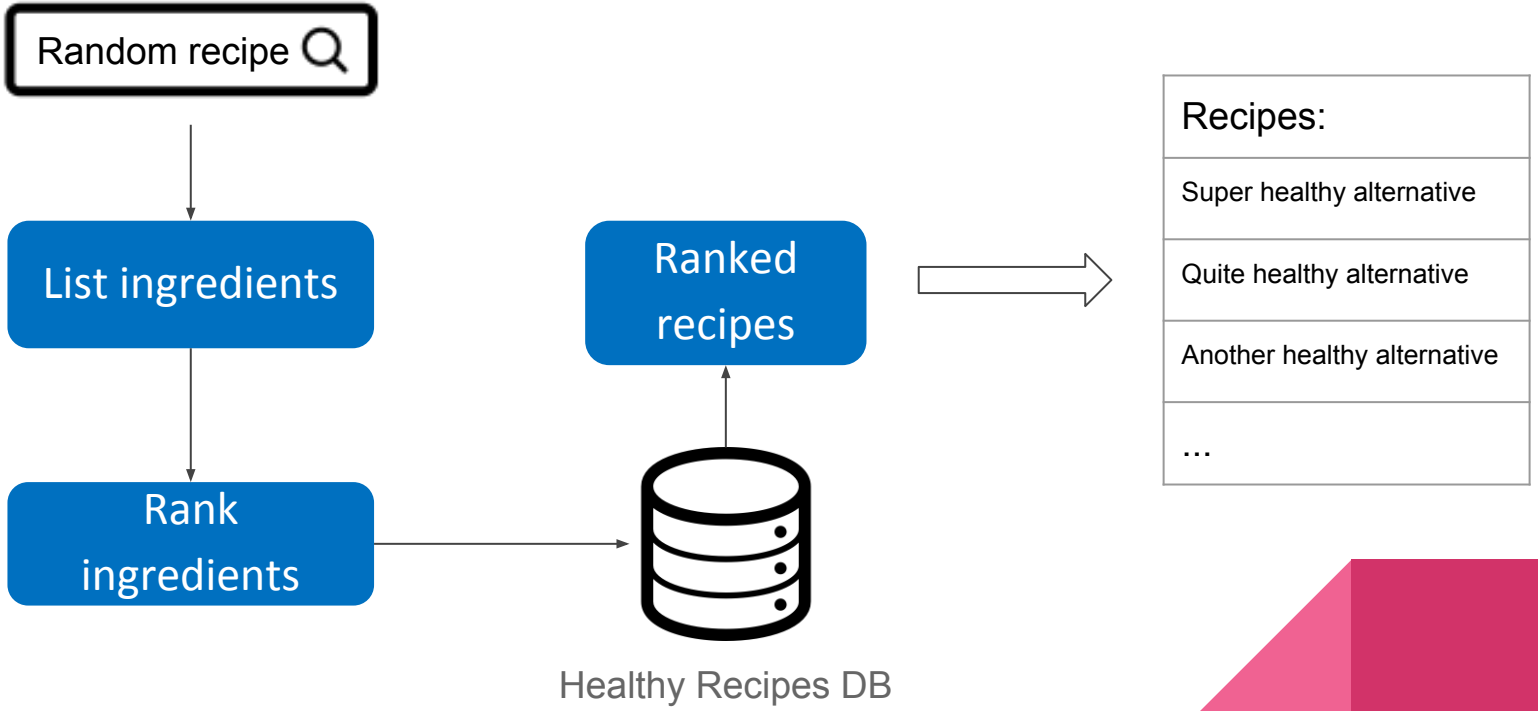




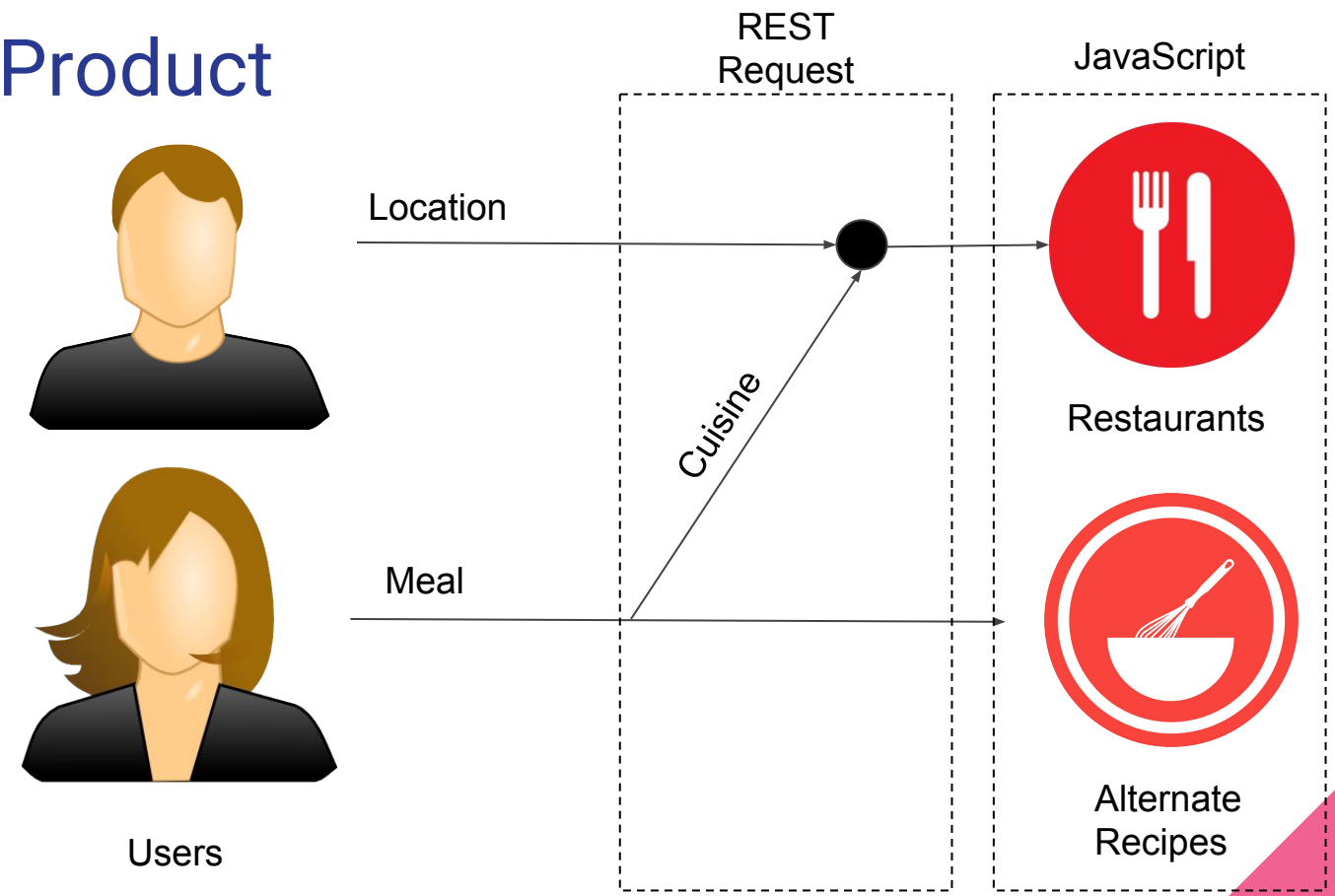

```
cuisine_relate('sushi')

[('japanese', 1728.0245485317525),
 ('korean', 271.400591867154),
 ('chinese', 230.00218683394075),
 ('jamaican', 156.54403705557118),
 ('mexican', 110.80739958225861),
```

Recipes Suggestion



Product


REST
Request
JavaScript
Location
Cuisine
Restaurants
Meal
Alternate
Recipes
Users

Demo

Overview & Future works

- Better datasets
- Partnership : Restaurants vs Supermarkets
- Scalability

Q & A