

What is the average response time for loading the main surplus food listing page?

What restaurants have been the most liked or positively reviewed this week?

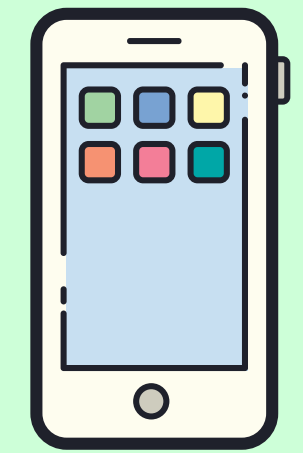
Which filtering options are most frequently used by user?

What are the most common categories of surplus food items listed by restaurants on the app?

Which restaurant or supermarket categories are gaining popularity among users in the last three months?

What are the most frequently searched cuisines or food preferences within the app?

## Data source

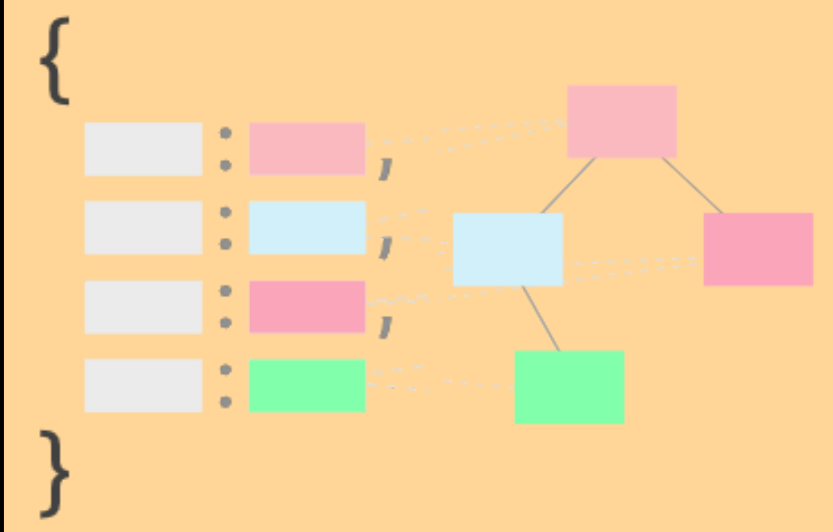


App data and user interaction (unstructured)

## Ingestion

- Detect lifecycle events of the surplus listing page. Measure and store the time taken from request initiation to full page load
- Detect interactions with the review submission feature. Store the review, associated restaurant, and timestamp of the review
- Detect user interactions with filtering components. Store frequency and type of filters applied or selected by users.
- Detect food item listings by restaurants, categorize surplus food based on predefined tags and store frequency of listed food categories and tags
- Store search terms entered by users, normalize them using NLP techniques, and record their frequency. Identify the most searched cuisines.
- Measure user engagement with different categories based on searches, filter usage, and product clicks. Aggregate and analyze interactions over the last three months to determine which categories are gaining popularity.

## Integration



Mapping of the relevant data fields with the firebase collection's and passing it to the API, which turns it into JSON format

## Storage



Object transfer to the Firestore collections (Document-NoSQL)

homepage\_load\_information  
restaurant\_reviews  
filter\_buttons\_usage  
food\_listing  
searches  
click\_interactions



## Data computation



## Presentation



- Box plot showing response time distribution and trends in app load times.
- Bar chart showing the highest-rated restaurants for the last week.
- Bar chart showing the most frequently used filters.
- Bar chart showing the most frequently searched food categories or terms.
- Bar chart showing the popularity index of restaurant and supermarket categories.